No.	Last name	First name	Email	Institution	If "yes" please	and an abstract
1	Abele	Hartmut	abele@ati.ac.at	Atominstitut - TU Wien	qBounce-Realization of a quantum Bouncing Ball Gravity Spectrometer	This talk is about a test of gravitation at small distances by quantum interference deep into the theoretically interesting regime of 10000 times gravity. The method is based on a new spectroscopy technique, devoid of electromagnetic coupling. The quantum bouncing ball allows us to observe transitions between gravitational quantum states, when a Schrödinger-wave packet of an ultra-cold neutron couples to mirror The technique is related to Rabi spectroscopy usually used in atom optics, and the experiment has the potential to test the equivalence principle and Newton's gravity law at the micron scale, because Newtonian gravity and hypothetical fifth forces evolve with different phase information. Such forces can be mediated from gauge bosons propagating in a higher dimensional space and this experiment can therefore test speculations on pseudo-scalar axion coupling, where effects are predicted in the interesting range of this experiment and might give a signal in an improved setup.
2	Anastassopoulos	Vassilis	vassilis@upatras.gr	University of Patras		
3	Andreas	Sarah	Sarah.Andreas@desy.de	DESY	Dark Forces and Dark Matter in a Hidden Sector	Hidden sectors arise naturally in various extensions of the standard model and also from string compactifications. They interact with the visible sector through potentially light messenger particles with very weak couplings. Such scenarios in which the hidden sector also contains a dark matter particle are of great interest since they could explain recent terrestrial and astrophysical anomalies, like the e+e- excesses observed by PAMELA, the annual modulation signal reported by DAMA/LIBRA and the low energy events seen by CoGeNT. In this talk I will focus on one particular messenger, the hidden U(1) gauge boson, presenting an update of constraints on the mass of this so called "hidden photon" and its coupling to the SM through kinetic mixing with the SM photon. I will also discuss phenomenological consequences for a light dark matter particle in this hidden sector, in the context of such a "dark force".
4	Aprile	Elena	age@astro.columbia.edu	Columbia University	XENON	
5	Arias	Paola	paola.arias@desy.de	DESY	Imprints of the hidden photon on cosmology	Theoretical background for an abelian hidden sector with light messengers has become robust enough to look for phenomenological consequences at low energy experiments. Our proposal extends previous studies on the effects of kinetic mixing in superconductors. Remarkably, a primer modification is the inclusion of a second penetration depth in the magnetic field. We study theoretical and phenomenological consequences, such as flux quantization, critical fields, vortexes dynamics, etc.
6	Avignone	Frank	avignone@sc.edu	University of South Carolina	The CUORE Experiment and Possible Axion Searches	The CUORE Experiment is being constructed in the Laboratorio Nazionale del Gran Sasso. It will have 750 kg of TeO2 crystals with known orientation. There is a proposal to the Collaboration to make a search for solar axions via the coherent Primakoff conversion of axions to photons in much the same way that SOLAX was done. This is possible because of a new breakthrough in obtaining low energy threshold data with these bolometers.
7	Baker	Oliver K.	oliver.baker@yale.edu	Yale University	to be determined later	to be determined later

8	battesti	remy	remy.battesti@lncmi.cnrs.fr	CNRS-LNCMI	XAX/BMV experiments	In this contribution, we will present the results of XAX experiment peformed at ESRF Grenoble France and the status of the BMV experiment set up at the LNCMI Toulouse France. We will describe this novel photon regeneration experiment for the axionlike particle search using an X-ray beam with a photon energy of 50.2 and 90.7 keV, two superconducting magnets of 3 T, and a Ge detector with a high quantum efficiency. A counting rate of regenerated photons compatible with zero has been measured. We will also present last results of the BMV experiment whose goal is to measure the birefringence induced in vacuum by the presence of the magnetic field.
9	Baudis	Laura	lbaudis@physik.uzh.ch	University of Zurich		
10	Bertone	Gianfranco	gf.bertone@gmail.com	ITP, U. of Zurich	Identifying Dark Matter	
11	Betz	Michael	mbetz@cern.ch	Cern	Status report of the CERN light shining through the wall experiment with microwave axions and related aspects	The detection of the existence of (relic) axions in the µeV to meV mass range will solve one fundamental problem in theoretical physics and cosmology (dark matter problem). One way to facilitate this is a microwave light shining through the wall experiment. In this talk we will emphasize on the engineering aspects of such an experiment, currently set up at Cern. One critical point, to achieve meaningful results, is the electromagnetic shielding between axion-emitter and –receiver cavity, which needs to be > 300 dB to improve over existing experimental bounds. The RF leakage or electromagnetic crosstalk between both cavities must be well controlled and quantified during the complete duration of the experiment, allowing us to proof that any observed signal originates from converted Axions. In addition a very high sensitivity receiver for the narrowband signal to be detected is required. The latter is implemented by using a phase locked tracking receiver method and we achieved so far an effective signal bandwidth below 10 µHz (with a corresponding thermal noise floor) for about 1 day of observation time. In this talk we discuss the development of a demonstration setup which should show the required 300dB isolation using a "box in a box" technique and optical fiber signal transmission. Also aspects linked to the evaluation and testing of the complete signal transmission and processing chain are addressed.
12	Brax	Philippe	philippe.brax@cea.fr	IPHT Saclay	too early to say	Sorry again, but working on several things.... It could be about Solar Chameleons.
13	Cadamuro	Davide	cadamuro@mppmu.mpg.de	Max-Planck-Institut für Phyisk	Late cosmology constraints on thermal relic axions and axion-like particles	Cosmological precision data can be used to set very strict constraints on Axions and Axion-like particles produced thermally in the big bang. We briefly review the known bounds and propose two new constraints for Axions and ALPs decaying in the early universe, based upon the concomitant dilution of baryon and neutrino densities, using WMAP7 and other cosmological data.

14	Cantatore	Giovanni	cantatore@ts.infn.it	University and INFN - Trieste	The BaRBE project and the perspectives of TES sensors in WISP searches	The BaRBE collaboration, funded by the italian INFN, is developing single-photon counting systems able to operate at extremely low background in low rate environments, such as those present in WISP search experiments. A BaRBE photomultiplier system, sensitive at visible energies, is presently optically coupled to one of the CAST magnet beamlines and has been taking sun-tracking data since 2009. Transition Edge Sensor (TES)-based photon counters hold the promise of becoming the detectors of choice for present and future WISP searches. TESs basically consist of a thin metal film deposited on suitable absorber. The film is held at the transition edge between normally- and super-conducting by means of an electro-thermal feedback. An excess of energy deposited in the absorber by incident radiation causes the film to steeply increase its resistance generating a signal. The main advantages of TES-based counters are a practically zero background rate, high energy resolution with spectroscopic response, and single-photon-counting capability. In addition, the peak-sensitivity energy can be chosen in a wide interval from sub-eV to tens of keV by tailoring the absorber material during the fabrication stage. TES drawbacks are the relatively small active area (typically 100x100 micron^2) and the ultracryogenic operation (around 100 mK). Refrigerators able to routinely reach sub-K temperatures are however commercially available, while researchers are already developing TES arrays pushing active areas up to 1x1 mm^2 and beyond. BaRBE is presently assembling a TES-based counter sensitive at 1-2 eV to characterize it and test its long-term background in view of employing it in actual WISP search experiments. Possible future developments at different energies will also be presented.
15	Carmona	Jose Manuel	jcarmona@unizar.es	Universidad de Zaragoza		
16	Crivelli	Paolo	crivelli@phys.ethz.ch	Institute for Particle Physics, ETH Zurich	Positronium portal into the Mirror World	In this talk, we will review the concept of mirror matter and describe an experiment to search for this hidden sector. Mirror matter could have a portal to our world through photon-mirror photon mixing (epsilon) which would lead to orthopositronium (o−Ps) to mirror orthopositronium oscillations. The experimental signature of this process is the apparently invisible decay of o−Ps. The expected sensitivity of the experiment in the mixing strength of 10−9 is more than one order of magnitude below the current Big Bang Nucleosynthesis limit and is in a region of parameter space of great theoretical and phenomenological interest. An experiment with such sensitivity is particularly timely in light of the recent DAMA/LIBRA observations of the annual modulation signal consistent with a mirror type dark matter interpretation.
17	Cushman	Priscilla	prisca@physics.umn.edu	University of Minnesota	Cosmogenic and Radiogenic Backgrounds: Generalized Tools for Underground Experiments	All dark matter and neutrinoless double beta decay experiments need to understand their neutron background and characterize their shielding radiopurity. ILIAS and AARM have provided the means for experiments to collaborate on common goals in simulation, Monte Carlo benchmarking, and screening. I will report on recent collaborative work on a universal materials database, a common simulation structure, and neutron benchmarking efforts, as well as plans for continuing this work over the next decade.
18	Dafni	Theopisti	tdafni@cern.ch	Universidad de Zaragoza	CAST	
19	Davenport	Martyn	martyn.davenport@cern.	CERN		
20	Denig	Achim	denig@kph.uni-mainz.de	Johannes Gutenberg University Mainz	Search for the Dark Photon at MAMI	We present an overview of possibilities for Dark Photon searches at the Mainz Microtron, a high-intensity electron accelerator for fixed target experiments. In a 4-days pilot run the A1 collaboration at MAMI could prove the feasibility of measurements of this kind. These results as well as future possibilites at a dedicated accelerator will be presented.

21	Derbin	Alexander	derbin@pnpi.spb.ru	St.Petersburg Nuclear Physics Institute	Search for 5.5 MeV solar axions with Borexino detector	I would like to present a poster: TITLE: Search for 5.5 MeV solar axions with Borexino detector AUTHORs: A. Derbin and V. Muratova on behalf of the Borexino collaboration. ABSTRACT: A search for 5.5-MeV solar axions emitted in the $p + d \rightarrow \rm{^3He} + \gamma (5.5\rm{MeV})$ reaction have been performed with Borexino detector. The Compton conversion of axion to a photon $A + e \rightarrow e + \gamma$, axioelectric effect $A + e + Z \rightarrow e + Z$, decay of axion in two photons $A \rightarrow 2\gamma$ and Primakoff conversion on nuclei $A + Z \rightarrow \gamma + Z$ are considered. The new constraints on constants of interaction of axion with electrons, photons and nucleons are obtained.
22	Döbrich	Babette	babette.doebrich@uni-jena.de	TPI Jena, Germany	Light-shining-through-walls with virtual minicharge particle-antiparticle states in external magnetic fields	Considering vacuum polarisation in an external magnetic field by virtue of minicharged particles, a novel light-shining-through-walls-scenario is presented where light passes a barrier through virtual fermionic or bosonic minicharge particle-antiparticle states. We compare this scenario, whose theoretical treatment heavily relies on non-perturbative analytical insights into the photon polarization tensor, to established experiments of the light-shining- through-walls (LSW) type and present prospective exclusion bounds in the fractional-charge-mass plane for a dedicated LSW setup. We argue that this LSW-scenario drastically differs from established searches on multiple levels, culminating in the observation that the exclusion limits derived from this process do not saturate for small minicharge masses and thus have the prospect of considerably improving established laboratory fermionic minicharge bounds.
23	Ehret	Klaus	klaus.ehret@desy.de	DESY		
24	Espriu	Domenec	espriu@ecm.ub.es	University of Barcelona	Photon propagation in a cold axion background with and without magnetic fields	A slowly time varying cold axion background induces subtle modifications in the properties of photons. The lack of Lorentz invariance allows for processes such as radiation from a charged particle (similar to tge Cerenkov effect)that are normally forbidden. Due to this cosmic rays generate a characteristic spectrum that is several orders of magnitude below the synchrotron radiation background, but may be eventually. The photon propagator in such a background is derived and it exhibits rather remarkable properties. Unfortunately these effects are also hard to detect.
25	Finger	Michael	michael.finger@cern.ch	Charles University in Prague		
26	Gavela	Belen	belen.gavela@uam.es	Universidad Autonoma de Madrid (UAM) and IFT	The flavour of neutrinos	Neutrino masses are evidence for physics beyond the Standard Model. Their masses and mixings have changed radically our perception of the flavour puzzle. Nevertheless, they cannot indicate by themselves what is the new underlying physics. Are there new -exotic- neutrino and/or charged lepton signals within reach, that may help to elucidate the origin of neutrino masses? We will discuss the present situation with a rather model-independent approach. The implications of Minimal Flavour Violation (a generic ansatz very successful in the quark sector) will be also discussed.
27	Gburek	Szymon	sg@cbk.pan.wroc.pl	Space Research Centre, Polish Academy of Sciences,Solar Physics Division	SphinX - Solar Photometer in X-rays	Solar Photometer in X-rays (SphinX) was a spectro-photometer designed to observe the solar corona in X-rays in the energy range 1.00 -15.00 keV. From February till 29 November 2009 SphinX measured solar X-ray flux almost continuously. All SphinX data are now available publicly in level-1 FITS format. Sphinx present repository status is discussed. Methods of processing SphinX data and possible directions of their analysis are explained. In particular properties of solar spectra are studied in order to find constraints for coupling constants in theories involving axions and their conversion to X-rays in magnetic field.

28	Gironnet	Johann	gironnet@ipnl.in2p3.fr	Institut de Physique Nucléaire de Lyon - CNRS	Latest results of Edelweiss II	The EDELWEISS-II collaboration has performed a direct search for WIMP dark matter with an array of ten 400 g heat-and-ionization cryogenic detectors equipped with interleaved electrodes for the rejection of near-surface events. Results from fourteen months of continuous operation at the Laboratoire Souterrain de Modane will be shown and their interpretation in terms of limits on the cross-section of spin-independent elastic and inelastic interactions of WIMPs and nucleons will be presented. The result obtained demonstrates the excellent background rejection capabilities of these simple and robust detectors in an actual WIMP search experiment. Some first results with 800 g detectors will be also presented together with the prospects for this experiment and the ton scale EURECA project.
29	Hasinoff	Michael	hasinoff@physics.ubc.ca	University of British Columbia		
30	Irastorza	Igor	igor.irastorza@cern.ch	Universidad de Zaragoza	A new generation axion helioscope	We present a proposal for a new generation axion helioscope, with a potential sensitivity to the axion photon coupling down to a few 10^-12 GeV^-1, 1-1.5 orders of magnitude beyond the CERN Axion Solar Telescope (CAST), currently the most powerful implementation of the axion helioscope concept. We show that such improvement is conceivable by fully exploiting innovations already introduced by CAST, namely, x-ray focusing optics and low background x-ray detectors, as well as a new magnet with substantially enlarged magnetic volume. If axions also couple to electrons, the Sun produces a larger flux for the same value of the Peccei-Quinn scale, allowing one to probe a broader class of models. Except for the axion dark matter searches, this experiment will be the most sensitive axion search ever, reaching or surpassing the stringent bounds from SN1987A and possibly testing the axion interpretation of anomalous white-dwarf cooling that predicts an axion mass of a few meV. Beyond axions, this new instrument will probe entirely unexplored ranges of parameters for a large variety of axion-like particles (ALPs) and other novel excitations at the low-energy frontier of elementary particle physics
31	Isern	Jordi	isern@ieec.cat	Insitute for Space Sciences (ICE´CSIC/IEEC)	White dwarfs as physical laboratories: the axion case	The evolution of white dwafs is just a simple process of cooling that is very sensitive to the physical ingredients used to describe it and can be tested using either the luminosity function (LF) or the sismological properties of such stars. Thanks to the large cosmological surveys, the LF is known at present with an unprecedented precision and this situation will improve in the next future. In this talk I describe the recent improvements in our understanding of the LF and how they translate into the axion problem.
32	Jaeckel	Joerg	joerg.jaeckel@durham.ac.	IPPP/Durham University		
33	Karbstein	Felix	felix.karbstein@uni-jena.de	Helmholtz-Institut Jena	Optical probes of the quantum vacuum: The polarisation tensor in external fields	In an effective field theory framework, quantum corrections to the light propagation in the presence of an external field enter through the photon polarization tensor. In order to correctly predict the observables of polarisation measurements aiming at the detection of vacuum birefringence, the Schwinger effect or transition probabilities for light-shining-through-wall experiments in the quest for WISPs, a diligent analytic treatment of the polarisation tensor is indispensable. In this talk, we review the polarisation tensor in a purely magnetic field and discuss the applicability and validity ranges of its most established approximations. Focussing on vacuum polarisation in an external magnetic field by virtue of minicharged particles, we resort to a special setting, allowing us to obtain novel nonperturbative insights. These in particular constitute the central input for Light-shining-through-walls scenarios with virtual minicharge particle- antiparticle states in external magnetic fields.

34	Keum	Yong-Yeon	yykeum2011@snu.ac.kr	Seoul National University	Neutrino Masses from Cosmological Probes within Lambda CDM and beyond	First, we summarize the neutrino mass bounds from the neutrinoless double beta decays. Then next we discuss in detail the neutrino mass bounds from cosmological probes within LCDM model and beyond. We investigate whether interaction between massive neutrinos and quintessence scalar field is the origin of the late time accelerated expansion of the universe. We present explicit formulas of the cosmological linear perturbation theory in the neutrinos probes of dark-energy model, and calculate cosmic microwave background anisotropies and matter power spectra. In these models, the evolution of the mass of neutrinos is determined by the quintessence scalar field, which is responsible for a varying effective equation of states: $\omega_{eff}(z)$ goes down -1. We consider several types of scalar field potential and put constraints on the coupling parameter between neutrinos and dark energy. By combining data from cosmic microwave background (CMB) experiments including the WMAP 3, 5 and 7-year results, large scale structure with 2dFGRS data sets, we constrain the hypothesis of massive neutrinos in the mass-varying neutrino scenario. Assuming the flatness of the universe, the constraint we can derive from the current observation is $\sum m_{\nu} < 0.45$ eV at 1σ (0.87 eV at 2σ) confidence level for the sum over three species of neutrinos. The dynamics of scalar field and the impact of scalar field perturbations on cosmic microwave background anisotropies are discussed. We also discuss on the instability issue of the our model and confirm that neutrinos are stable against the density fluctuation.
35	Kharzeev	Dmitri	dmitri.kharzeev@stonybrook.edu	Stony Brook University	Axions and the Chiral Magnetic Effect (invited)	Chiral Magnetic Effect is the phenomenon of electric charge separation induced by the imbalance of chirality in the presence of external magnetic field. I will discuss the current theoretical status and the recent evidence for the effect from Relativistic Heavy Ion Collider at BNL. I will also speculate on the possible applications of the effect in cosmology and astrophysics.
36	Kim	Jihn E.	jihnekim@gmail.com	Seoul National University	The mu problem,	
37	Kishimoto	Yasuhiro	kisimoto@km.icrr.u-tokyo.ac.jp	Kamioka-Observatry, ICRR	Recent status of XMASS experiment	The XMASS project aims to study low-energy solar neutrinos, dark matter and double beta decay using ultra pure liquid xenon. As a first step of the project, a detector with 800kg of liquid xenon in a single phase for dark matter search was proposed and constructed. In this talk, construction of the detector, calibration using a radioactive source, and study on radioactive contamination will be presented.
38	Ko	Pyungwon	pko@kias.re.kr	Korea Institute for Advanced Study	EWSB and CDM from strongly interacting hidden sector	We present a model where all the mass scales and electroweak symmetry breaking (EWSB) are generated by new strong interaction in a hidden sector. In analogy to ordinary QCD (with electroweak interactions switched off), the hidden sector baryons and the lightest Nambu-Goldstone bosons could be good cold dark matter candidates.

39	Lamanna	Giovanni	lamanna@lapp.in2p3.fr	LAPP (CNRS/IN2P3)	Indirect Dark Matter search with H.E.S.S. - G. Lamanna for the H.E.S.S. collaboration	Measurements of parameters of the Cosmological Standard Model with the WMAP satellite provide stringent constraints on the Dark Matter relic density. Dark Matter accounts for 25% of the mass-energy budget of the Universe, but its nature is still to be discovered. The hypothesis that dark matter is made of WIMPs (weakly interacting massive particles), arising from the extensions of the standard model of particle physics, is explored by the latest generation of astroparticle experiments. Indirect Dark Matter search methods are sensitive to self-annihilating/decay Dark Matter candidates and allow to constrain the Dark Matter halo profiles and the WIMP annihilation cross-section. In particular the annihilations of (massive) WIMPs can lead to the production of high and very-high energy GeV and TeV gamma-rays in the final state. The final state annihilation photons may be detected by Imaging Atmospheric Cherenkov Telescopes like H.E.S.S. or by a satellite instrument like Fermi. Annihilation radiation from various candidate regions with enhanced Dark Matter density and related observations performed with H.E.S.S. experiment are reviewed in relation with results from other experiments (e.g. MAGIC and Fermi).
40	Li	Hau-Bin	lihb@phys.sinica.edu.tw	Institute of Physics, Academia Sinica, Taipei, Taiwan.	Dark Matter Searches with sub-keV Germanium Detector	Dark Matter Searches with sub-keV Germanium Detector Li Hau-Bin on behalf of CDEX/TEXONO collaboration CDEX/TEXONO collaboration deals with the fundamental questions like neutrino magnetic moments, neutrino-nucleus coherent scattering, as well as WIMP dark matter searches at the Kuo-Sheng Neutrino Laboratory (KSNL) and Chinese Jinping Underground Laboratory (CJPL). Ultra-Low Energy Germanium (ULEGe) and Point-Contact Germanium (PCGe), detectors were being used for such measurements. These LEGe detectors extend the performance range of Ge detectors down to a few hundreds of electron volts, providing good resolution, peak shape, and peak-to-background ratios. In this talk, we will present the the status of Chinese Jinping Underground Laboratory (CJPL), as well as WIMP search results at Kuo-Sheng Neutrino Laboratory.
41	Lindner	Axel	axel.lindner@desy.de	DESY	Do to be announced	Do to be announced later
42	Manalaysay	Aaron	aaronm@physik.uzh.ch	University of Zurich	Probing low-mass WIMPs	
43	Martin	Andrew	andrew.martin@yale.edu	Yale University	First results from Yale 34GHz cavity experiment	The first experimental results from the 34GHz cavity experiment are presented. We are sensitive to the coupling of 2 photons to a light neutral boson in the presence of a 7T magnetic field and to the mixing between photons and hidden sector photons. We demonstrate the sensitivity of the experiment to light neutral bosons and hidden sector photons.
44	Meyer	Manuel	manuel.meyer@physik.uni-	University of Hamburg	Indications for a highly	The transparency of the universe for very high energy (VHE) photons is limited due to pair-production with low energy photons of the extra galactic background light (EBL) in the optical to infrared band. Here, we use 54 energy spectra from VHE
45	Moore	Ben	moore@physik.uzh.ch	Institute for Theoretical		
46	Moulin	Emmanuel	emmanuel.moulin@cea.fr	Irfu, CEA Saclay	Prospects for dark matter searches with CTA	Dark matter particle annihilations are expected to occur in dense regions of the Galactic halo, dwarf satellite galaxies of the Milky Way and other types of substructures. These annihilations produce high energy gamma-rays in the final state. The future array of ground-based Cherenkov telescopes CTA is a well suited instrument to look further for particle dark matter. In this talk, I will present the dark matter prospects for CTA using targeted and wide-field survey searches, and discuss the pros and cons of these strategies.

47	Muratova	Valentina	muratova@pnpi.spb.ru	St. Petersburg Nuclear Physics Institute	Search for 5.5 MeV solar axions with Borexino detector	I would like to present the poster: TITLE: Search for 5.5 MeV solar axions with Borexino detector AUTHORs: A. Derbin and V. Muratova on behalf of the Borexino collaboration ABSTRACT: A search for 5.5-MeV solar axions emitted in the $p + d \rightarrow \rm{^3He} + \gamma (5.5\rm{MeV})$ reaction have been performed with Borexino detector. The Compton conversion of axion to a photon $A + e \rightarrow e + \gamma$, axioelectric effect $A + e + Z \rightarrow e + Z$, decay of axion in two photons $A \rightarrow 2\gamma$ and Primakoff conversion on nuclei $A + Z \rightarrow \gamma + Z$ are considered. The new constraints on constants of interaction of axion with electrons, photons and nucleons are obtained.
48	Payez	Alexandre	a.payez@ulg.ac.be	University of Liege	New constraints on very light pseudoscalars	There are many puzzling astrophysical observations for which solutions involving nearly massless axion-like particles have been proposed. Some constraints on the parameter space of these particles do exist in the literature. Here, we consider the polarisation coming from axion-photon mixing in our supercluster and show that polarimetry considerations applied to quasars lead to new constraints.
49	Povey	Rhys	rhys.povey@uwa.edu.au	University of Western Australia	Experimental search for the hidden sector photon at UWA	Building on the design of our earlier prototype, the progress and latest findings of the microwave cavity experiment to search for hidden sector photons at UWA is reported. With a pair of isolated cavities the presence of hidden sector photons can be inferred from any 'light shining through a wall' as the result of photon - hidden sector photon - photon oscillations. Using a high Q superconducting Niobium emitter cavity and a moderate Q room temperature copper detector cavity, separated by ample shielding, the projected sensitivity to the kinetic mixing factor is chi ~ 10^(-10) near a hidden sector photon mass of 40 micro electron volts. The development of a possible new method for microwave cavity hidden sector photon searches will also be discussed.
50	Redondo	Javier	redondo@mppmu.mpg.d	MPI, Munich	Hunting for meV axions	to come.
51	Ringwald	Andreas	andreas.ringwald@desy.d	DESY		
52	Ruz Armendáriz	Jaime	Jaime.Ruz@cern.ch	CERN		
53	Rybka	Gray	grybka@uw.edu	University of Washington	The Axion Dark Matter Experiment: Results and Future Prospects	The Axion Dark Matter Experiment (ADMX) has recently completed a year of data taking using a SQUID amplifier, placing new limits on KSVZ-coupled axion dark matter. Results from this run are presented and the next generation of ADMX, currently under construction, will be discussed.
54	Sadoulet	Bernard	sadoulet@berkeley.edu	University of California, Berkeley	Recent results from CDMS and plans	I will present the recent results from the Cryogenic Dark Matter Search, in particular about the possibility of a Weakly Interactive Massive Particle of 7 GeV/c2 mass. I will also describe our plans: our new payload at Soudan, the next stage with a 100kg target mas at SNOLAB and a ton scale experiment in the future.
55	Schmidt-Wellenburg	Philipp	philipp.schmidt-	Paul Scherrer Institut	An improved search of the	
56	Schumann	Marc	marc.schumann@physik.u	University of Zurich		

57	Schwarz	Matthias	mschwarz@hs.uni-hamburg.de	Hamburger Sternwarte (Universität Hamburg)	SHIPS - Solar Hidden Photon Search	The main target of the Solar Hidden Photon Search (SHIPS) is to detect the solar emission of a new species of particles, so called Hidden Photons (HPs), also known as paraphotons. Photons and HPs convert into each other as they propagate in the same fashion that neutrinos oscillate among different flavors, or kaons among different CP eigenstates. A small amount of solar HPs can be efficiently converted into photons in a long and straight vacuum pipe. The Sun could then be observed continuously in the 'light' of HPs with a SHIPS helioscope. These adapted astronomical telescopes employ imaging optics and low-flux detectors in a vacuum chamber to achieve high sensitivity, contrast and spatial resolution.
58	Semenov	Dmitry	dmsemenov@pnpi.spb.ru	PNPI	Search for solar axions using resonant absorption by 169Tm nuclei.	A search for resonant absorbtion of 14.4 keV solar axions by ^{57}Fe target was performed. The Si(Li) detector placed inside the low-background setup was used to detect the γ-quanta appearing in the deexcitation of 14.4 keV nuclear level: $A+\rm{^{57}Fe} \to \rm{^{57}Fe^{*}} \to \rm{^{57}Fe} + \gamma$. The new upper limit for the hadronic axion mass have been obtained: $m_{A} \leq 151$ eV (90% C.L.) (S=0.5, z=0.56).
59	Semertzidis	Yannis	yannis@bnl.gov	Brookhaven National Laboratory	Review of EDM experiments	Electric dipole moment experiments are already constraining the CP-violating phases of speculative models, like SUSY. The next generation experiments of the neutron, proton, deuteron, electron, mercury, xenon, etc. will either discover a non-zero EDM value by the end of the decade or will constrain the available parameter space by two to three orders of magnitude, essentially eliminating the electroweak baryogenesis scenario.
60	Sikivie	Pierre	sikivie@phys.ufl.edu	University of Florida	Bose-Einstein Condensation of Dark Matter Axions	The axion provides a solution to the strong CP problem and is a cold dark matter candidate. I'll briefly review the limits on the axion from particle physics, stellar evolution and cosmology. The various constraints suggest that the axion mass is in the micro-eV to milli-eV range. In this window, axions contribute significantly to the energy density of the universe in the form of cold dark matter. It was recently found that dark matter axions thermalize and form a Bose-Einstein condensate (BEC). As a result, it may be possible to distinguish axions from other forms of dark matter, such as weakly interacting massive particles (WIMPs), on observational grounds. Axions accreting onto a galactic halo fall in with net overall rotation because almost all go to the lowest energy available state for given angular momentum. In contrast, WIMPs accrete onto galactic halos with an irrotational velocity field. The inner caustics are different in the two cases. I'll argue that the dark matter is axions because there is observational evidence for the type of inner caustic produced by, and only by, an axion BEC.
61	Steinkamp	Olaf	olafs@physik.uzh.ch	Physik-Institut Universitaet Zuerich	LHCb Performance, Physics, Prospects	The LHCb experiment at CERN's Large Hadron Collider is looking for signatures of New Physics beyond the Standard Model through precision measurements of processes involving B mesons and other hadrons containing b or c quarks. Of particular interest are observables that are suppressed in the Standard Model and exhibit high sensitivity to New Physics through possible contributions from new heavy particles in loop diagrams. By searching for New Physics indirectly via the effect of virtual particles in internal loops, LHCb will extend the discovery potential to masses far in excess of those accessible in direct searches at the LHC. LHCb has seen a rapid and successful startup during the first physics run of the LHC in 2010. About 37/pb of pp collisions at 7 TeV have been collected in 2010. Based on this data set, preliminary results for several key analyses have been presented at conferences. Some of these results are already competitive with existing measurements and have been published or are being prepared for publication. An additional 80/pb of data have already been collected during the first four weeks of LHC physics operation in 2011. A total 1/fb are expected to be accumulated by the end of 2011. With this data sample, LHCb will be able to perform sensitive searches for New Physics in many analyses. In my talk, I will give a brief overview of the LHCb detector performance and operational experience, present highlights from the analysis of the 2010 data, and discuss the discovery potential for New Physics in some of the key channels.

62	Strauss	Raimund	raimund.strauss@ph.tum.de	Physik Department E15, TU München	Direct Dark Matter Search with CRESST II	CRESST (Cryogenic Rare Event Search with Superconducting Thermometers) is an experiment aimed at the direct detection of Dark Matter. A well motivated candidate to account for Dark Matter are WIMPs (Weakly Interacting Massive Particles). The expected WIMP signature consists in a nuclear recoil of a few keV measured in low-temperature CaWO4 detectors equipped with superconducting transition sensors operated at a few mK. CRESST has presently taken more than 700 kilogram-days of Dark Matter data (2009-2011), which are presently under evaluation. A preliminary analysis of this data yields an excess of oxygen recoil events, which is presently difficult to explain with neutrons or alpha, beta and gamma background alone. If conventional background contributions can be ruled out, part of the signal could also be interpreted as a Dark Matter signature of low-mass WIMPs.
63	Sulc	Miroslav	miroslav.sulc@tul.cz	Technical University of		
64	Suzuki	Yoichiro	suzuki@suketto.icrr.u-	Kamioka Observatory, ICRR,		
65	Tanner	David	tanner@phys.ufl.edu	University of Florida	The ADMX Phase I axion search	The Axion Dark Matter eXperiment (ADMX) recently completed a search for halo axions using a superconducting (SQUID) first-stage amplifier. This experiment excludes KSVZ dark-matter axionswith masses between 3.30 microeV and 3.53 microeV. A high-resolution search sets a slightly better limit on unvirialized flows. The experiment also searched for chameleons and hidden sector photons.
66	Touramanis	Christos	c.touramanis@liverpool.ac.uk	University of Liverpool	Neutrino oscillations - experimental review and prospects	Neutrino oscillations is a very active field with a number of experiments from Europe, USA, and Asia presenting results or starting up, and more in the preparation or proposal stage. This talk will give an overview of where we stand and what are the main questions and projects coming up to provide answers.
67	Troitsky	Sergey	st@ms2.inr.ac.ru	Institute for Nuclear Research	talk TBA	
68	Unzhakov	Evgeniy	unzhakov@pnpi.spb.ru	PNPI	Search for solar axions using resonant absorption by 169Tm nuclei.	The search for resonant absorption of the Primakoff solar axions by ^{169}Tm nuclei have been performed. Such an absorption should lead to the excitation of low-lying nuclear energy level: $A+^{169}$Tm $\to ^{169}$Tm* $\to ^{169}$Tm$ + \gamma$ (8.41 keV). The Si(Li) detector and ^{169}Tm target placed inside the low-background setup were used for that purpose. As a result, a new restriction on the axion-photon coupling and axion mass was obtained: $g_{A\gamma}({GeV}^{-1})\cdot m_A(eV)\leq1.36\cdot10^{-5}$ (90% c.l.). In model of hadronic axion this restriction corresponds to the upper limit on axion mass - $m_A\leq$ 191 eV for 90% c.l.
69	van der Graaf	Harry	vdgraaf@nikhef.nl	Nikhef	GridPix TPCs and their application in Dark Matter and Double Beta Decay Experiments	With the GridPix detecor, the position of indiviual primary electrons, created in an interaction between a fast charged particle and the gas in the drift gap, can be measured in 3D with good position and time resolution. With a thin drift gap of only 1 mm, this 'Gossip' detector could replace Si as tracking detector: per layer it measures a track segment (vector) instead of a space point, and it is more radiation hard. The ATLAS collaboration has approved GridPix/Gossip as R&D project for the ATLAS Upgrade. There is interest to apply a GridPix TPC as LVL 1 momentum trigger. New applications of GridPix TDCs are under investigation such as (polarised) photon detector, and WIMP detection in liquid Xe or ar experiments, and in v-less double beta decay experiments. The production of InGrids by industry is ongoing: low-cost GridPixes based on the TimePix pixel chip are expected to be available soon.

70	von Seggern	Eike	jvonsegg@cern.ch	DESY	Status of the ALPS-II experiment at DESY	The light-shining-through-a-wall (LSW) experiment ALPS at DESY gives the current best lab-based bounds for WISP couplings and masses. Based on this success, preparations for ALPS-II have started. The aim is to increase the sensitivity by five orders of magnitude in order to probe parameter regions with astrophysical hints from white dwarf energy loss and the TeV transparency of blazar blobs and achieve a sensitivity similar to indirect WISP searches, like CAST. To reach this sensitivity, the laser power in the WISP-production region will be increased and a second optical cavity in the regeneration region will be constructed. Additionally, we will make use of a longer magnet string and develope a very low-noise transition-edge photo-detector. In a pre-experiment, it will be possible to rule out the hidden-photon interpretation of the WMAP7 excess in sterile neutrinos. In this talk I will present these improvements and their impact on the sensitivity.
71	Wester	William	wester@fnal.gov	Fermilab	Laser Experiments at Fermilab for WISPs and Other Effects	After a brief summary of the completed experiments of GammeV and GammeV-CHASE where a search has been made for axion-like and chameleon particles, a new effort called the Fermilab Holometer will be described. The first phase involves R&D in setting up and operating a 40m long optical cavity that has relevance for a future resonant regeneration experiment. The second phase involves building two interferometers to search for a possible new jitter of space-time itself that can be derived from the holographic principle.
72	Zioutas	Konstantin	zioutas@cern.ch	University of Patras	TBC	later