

**12th Patras 2016 Workshop on Axions, WIMPs,
and WISPs
Jeju Island in South Korea, Suites Hotel**

**Sunday evening, 19 June, Registration and light refreshments, at
Suites Hotel**

**Monday, 20 June 2016
Room**

Start Time Duration

08:30 00:30 **Conference Registration**

09:00 00:15 Welcome and introduction

09:15 00:30 CP-conservation in QCD; Why only axions work?

09:45 00:20 Status of KIMS-NAI Experiment

10:05 00:25 Latest results with the KWISP force sensor at CAST

10:30 00:30 Search for hidden particles with SHiP

11:00 00:30 C O F F E E B R E A K

11:30 00:20 Launching the axion dark matter experiment at CAPP/IBS in Korea

11:50 00:25 The local DM distribution from hydrodynamic simulations

12:15 00:20 Dark Energy at colliders

Single Microwave Photon Detectors for High Frequency Axion

12:35 00:20 Detection

13:00 14:00 Lunch

Chair:

Local Organizing Committee

Yannis Semertzidis

Jihn E. Kim

Jungsic Park

Giovanni Cantatore

Chun Sil Yoon

Woohyun Chung

Nassim Bosorgnia

Christoph Englert

Chou Aaron

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| 14:00 | 00:20 | Detecting very low mass Dark Matter particles with NEWS-SNO | Gilles Gerbier |
| 14:20 | 00:20 | SIMP DM with discrete symmetries | Soo-Min Choi |
| 14:40 | 00:20 | Status and Recent Results from the PandaX Experiment | Mengjiao Xiao |
| 15:00 | 00:20 | Nonperturbative Dynamics in DM Freezout | William Shepherd |
| 15:20 | 00:20 | NEWS: Nuclear Emulsions for WIMP Search | Murat Guler |
| 15:40 | 00:20 | The CRESST experiment: Current status and future development | Marc Wuestrich |
| 16:00 | 00:30 | C O F F E E B R E A K | |
| 16:30 | 00:35 | WIMP direct detection: towards a minimal set of assumptions | Paolo Gondolo |
| 17:05 | 00:35 | LIGO, GW150914: a black hole binary merger discovered by gravitational-wave observation | Chunglee Kim |
| 17:40 | 00:20 | QUAX and AXIOMA: new experimental methods in axion detection | Caterina Braggio |
| 18:00 | | END | |

Tuesday, 21 June 2016
Room

| Start Time | Duration | | Chair: |
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| 08:30 | 00:30 | Conference Registration | Local Organizing Committee |
| 09:00 | 00:35 | Status of the Cosmic Axion Spin Precession Experiment (CASPEr) | John W. Blanchard |
| 09:35 | 00:20 | LUX | Simon Fiorucci |
| 09:55 | 00:20 | GERDA - Phase I results and news from the phase II upgrade | Katharina von Sturm |
| 10:15 | 00:20 | Preliminary study for a New Axion Dark-Matter Haloscope | Pierre Pugnât |
| 10:35 | 00:20 | SUSY DM predictions for Direct Detection Experiment, the LHC and the ILC | Miriam Lucio Martínez |
| 11:00 | 00:30 | C O F F E E B R E A K | |
| 11:30 | 00:20 | Status of the XENON experiment | Junji Naganoma |

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| 11:50 | 00:20 | Dark Matter Search with DARWIN | Moritz von Sivers |
| 12:10 | 00:20 | Monopole Searches at the LHC: new results and future plans | Jim Pinfold |
| 12:30 | 00:20 | The LUX-ZEPLIN Dark Matter Experiment | Isabel Lopes |
| 13:00 | 14:00 | Lunch | |
| 14:00 | 00:20 | An abundance of relaxions? | Chanda Prescod-Weinstein |
| 14:20 | 00:20 | Axion haloscopes with toroidal geometry at CAPP/IBS | Byeong Rok Ko |
| 14:40 | 00:20 | Searches for Axion-Like Particles with NGC1275 | Sven Krippendorf |
| 15:00 | 00:20 | Axion search with the CDEX-1 experiment | Shukui Liu |
| 15:20 | 00:20 | New limits on heavy ALPS: an analysis of SN1987A, again | Pedro Cavalcanti Malta |
| 15:40 | 00:20 | Gamma-rays as probes for axion-like particles | Manuel Meyer |
| 16:00 | 00:30 | C O F F E E B R E A K | |
| | | Dish antenna Searches for WISPy DM: Directional Resolution and | |
| 16:30 | 00:20 | Limitations for Small Masses | Stefan Knirck |
| 16:50 | 00:20 | DarkSide WIMP Search with Underground Argon | Masayuki Wada |
| 17:10 | 00:20 | Layered dielectric haloscopes: a new approach to detect axion DM | Alexander Millar |
| 17:30 | 00:20 | The Sun and its Planets as detector for invisible matter | Sergio Bertolucci |
| 18:00 | | END | |

Wednesday, 22 June 2016
Room

| Start Time | Duration | | Chair: |
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| 09:00 | 00:35 | Big neutrino projects | Kam-Biu Luk |
| 09:35 | 00:20 | Parton distributions in the search for Dark Matter | Timothy Hobbs |

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| 09:55 | 00:20 | Relaxion with multiple axions | Kiwoon Choi |
| 10:15 | 00:20 | Searching for Dark Matter candidate with the AURIGA detector | Antonio Branca |
| 10:35 | 00:20 | Latest results from the DAMIC experiment | Diego Torres-Machado |
| 11:00 | 00:30 | C O F F E E B R E A K | |
| 11:30 | 00:20 | Recent results and future plans of XMASS | Byeongsu Yang |
| 11:50 | 00:25 | Status of the ADMX-HF Extreme Axion Experiment | Samantha Lewis |
| 12:15 | 00:20 | Formation of Axion Miniclusters | Javier Redondo |
| 12:35 | 00:20 | DEAP-3600 | Jocelyn Monroe |
| 13:00 | 14:00 | Lunch | |

14:00 Excursion

Excursion to Tropical Hallim Park

"Hallim park is one of the most popular tourist spots on Jeju Island with nine fantastic theme parks full of exotic sentiment. Hyeopjae beach and an olle trail nearby are also enjoyable."

18:00 END

Thursday, 23 June 2016

Room

Start Time Duration

09:00 00:45 ATLAS/CMS

Search for bosonic dark matter with the MAJORANA

09:45 00:25 DEMONSTRATOR

10:10 00:20 Aharonov Bohm type experiments

10:30 00:25 Commissioning of the ADMX Gen 2 Dark Matter Search

11:00 00:30 C O F F E E B R E A K

11:30 00:20 A new QCD DM axion search using a dielectric resonant cavity
Dark Matter Searches for Monoenergetic Neutrinos Arising from

11:50 00:20 Stopped Meson Decays in the Sun

12:10 00:20 STAX: A search for axion-like particles with sub-THz photons
Beyond the Dark Matter effective field theory and a simplified
12:30 00:20 model approach at colliders: Higgs portal DM as examples

Chair:

Alex Martyniuk

Christopher O'Shaughnessy

Paola Arias

Gray Rybka

Bela Majorovitz

In Seongjin

Jacopo Ferretti

Pyungwok Ko

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| 13:00 | 14:00 | Lunch | |
| 14:00 | 00:20 | Status and prospect of CDEX and China Jinping underground lab | Hao Jiang |
| 14:20 | 00:20 | Simulations of ultralight axion dark matter halos | Jens Niemeyer |
| 14:40 | 00:20 | Cosmological relaxation of the Electroweak scale | Surjeet Rajendran |
| 15:00 | 00:20 | Diphoton resonance confronts dark matter | Yoojin Kang |
| 15:20 | 00:20 | Any Light Particle Search II (ALPS II) | Aaron Spector |
| 15:40 | 00:20 | Multiple-cavity detectors for axion dark matter search | SungWoo Youn |
| 16:00 | 00:30 | C O F F E E B R E A K | |
| 16:30 | 00:20 | Poster Session at Suites Hotel Lobby | |
| 16:50 | 00:20 | Poster Session at Suites Hotel Lobby | |
| 17:10 | 00:20 | Poster Session at Suites Hotel Lobby | |
| 17:30 | 00:20 | Poster Session at Suites Hotel Lobby | |
| 18:00 | | Conference dinner | |
| | | Conference Dinner talk by K. Zioutas | |

Friday, 24 June 2016
Room

| Start Time | Duration | | Chair: |
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| | | SM*A*S*H - Standard Model * Axion * See-saw * Hidden scalar | |
| 09:00 | 00:35 | inflation | Andreas Ringwald |
| 09:35 | 00:20 | The CAST-CAPP/IBS Detector Project: Progress and Challenges | Lino Miceli |
| 09:55 | 00:20 | Search for dark particles at BELLE | Eunil Won |
| 10:15 | 00:20 | Latest results from IceCube | Carsten Rott |
| 10:35 | 00:20 | A new detector at the LHC to search for millicharge particles | Gabriel Magill |
| 11:00 | 00:30 | C O F F E E B R E A K | |
| 11:30 | 00:20 | Dark matter research cluster based on computational science | Kihyeon Cho |

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| 11:50 | 00:20 | Preliminary data analysis of OSCAR-CHASE results | Pierre Pognat |
| 12:10 | 00:20 | New Coupling Constrains on Light Bosons beyond the SM | Changbo Fu |
| 12:30 | 00:30 | Small Scale Structure of Dark Matter | Subha Majumdar |
| 13:00 | 00:20 | Strings and their Cores | Leesa Fleury |
| 14:20 | 00:20 | CMB polarization and pseudoscalar particles | Damian Ejlli |
| 13:40 | 00:20 | High and low mass axion haloscopes at Univ. of Western Australia | Ben McAllister |
| 14:00 | 00:20 | Status of CUORE: an observatory for neutrinoless double beta decay and other rare events | Maria Martinez |

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| 14:30 | 15:30 | Lunch |
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| 15:30 | End of Patras 2016 workshop |
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