

## 8th Bethe Center Workshop „Particle Physics meets Cosmology“

Time	Monday, 10 <sup>th</sup>	Tuesday, 11 <sup>th</sup>	Wednesday, 12 <sup>th</sup>	Thursday, 13 <sup>th</sup>	Friday, 14 <sup>th</sup>	
07:30 - 09:00	Registration					
09:00 - 09:45	Marc Schumann	Alexei Smirnov		Konrad Kuijken	Georg Weiglein	
09:45 - 10:30	Dan Hooper	Christof Wetterich	Volker Springel	Carlos S. Frenk	Will Percival	
10:30 - 11:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11:00 - 11:45	Felix Kahlhöfer	Andreas Ringwald	Liam McAllister	Adam Mantz	Ariel Sánchez	
11:45 - 12:30	Manuel Drees	Jörg Jaeckel	Alexander Westphal	Joseph Mohr	Alex Nielsen	
12:30 - 14:00	Lunch	Lunch	Lunch	Lunch	Lunch	
14:00 - 14:45	Johannes Haller	Fabian Rühle	14:00 - 14:20	Andreas Trautner	Michael Kramer	
			14:20 - 14:40	Sang Hui Im		
14:45 - 15:30	Günter Sigl	Dieter Lüst	14:40 - 15:00	Sven Krippendorf	Surjeet Rajendran	
			15:00 - 15:20	Bruno Leibundgut		
15:30 - 16:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break		
16:00 - 16:45	Kerstin Tackmann	16:00 - 16:20	Georg Wolschin		16:00 - 16:45	Hendrik Hildebrandt
16:45 - 17:05	Iason Baldes	16:20 - 16:40	Matthias Bartelmann		16:45 - 17:30	Matthias Steinmetz
17:05 - 17:25	Glauber Dorsch	16:40 - 17:00	Christian Arnold		17:30 - 17:50	Tim Schrabback
17:25 - 17:45	Raghuveer Garani	17:00 - 17:20	Santiago Casas	PI Meeting	17:50 - 18:10	Victoria Yankelevich
17:45 - 18:05	Yashar Akrami	17:20 - 17:40	Behnam Javanmardi			
		18:00 - 23:00	Boat Trip			

## TALKS OVERVIEW

Name	Title	Date & Time
<b>Akrami, Yashar</b> (Leiden University)	Infrared modification of gravity from massive (multi-) gravitons to nonlocality: theoretical viability and cosmological constraints	Monday 10 <sup>th</sup> , 17:45 - 18:05
<b>Arnold, Christian</b> (ITP, Heidelberg)	Zoomed simulations of Milky-Way sized halos in f(R) gravity	Tuesday 11 <sup>th</sup> , 16:40 - 17:00
<b>Baldes, Iason</b> (DESY, Hamburg)	Flavour cosmology: electroweak baryogenesis from dynamical Yukawas in the Froggatt-Nielsen mechanism	Monday 10 <sup>th</sup> , 16:45 - 17:05
<b>Bartelmann, Matthias</b> (Universität Heidelberg)	A new theory for cosmic structure formation	Tuesday 11 <sup>th</sup> , 16:20 - 16:40
<b>Casas, Santiago</b> (ITP, Heidelberg)	Heating of Neutrino background and lump dynamics in growing neutrino quintessence	Tuesday 11 <sup>th</sup> , 17:00 - 17:20
<b>Dorsch, Glauber</b> (DESY, Hamburg)	Baryogenesis and gravitational waves from two-Higgs-doublet models	Monday 10 <sup>th</sup> , 17:05 - 17:25
<b>Drees, Manuel</b> (bctp, Universität Bonn)	Naturalness in Supersymmetry	Monday 10 <sup>th</sup> , 11:45 - 12:30
<b>Frenk, Carlos</b> (Durham University, UK)	Observational tests of LambdaCDM	Thursday 13 <sup>th</sup> , 09:45 - 10:30
<b>Garani, Raghuv</b> (bctp, Universität Bonn)	Dark Matter Annihilations in the Sun: Scattering on electrons	Monday 10 <sup>th</sup> , 17:25 - 17:45
<b>Haller, Johannes</b> (Universität Hamburg)	Latest Results from CMS	Monday 10 <sup>th</sup> , 14:00 - 14:45
<b>Hildebrandt, Hendrik</b> (AlfA, Universität Bonn)	Weak Gravitational Lensing with the Kilo Degree Survey	Thursday 13 <sup>th</sup> , 11:45 - 12:30
<b>Hooper, Dan</b> (Fermilab, USA)	The Status of Indirect Searches for Dark Matter	Monday 10 <sup>th</sup> , 09:45 - 10:30
<b>Im, Sang Hui</b> (bctp, Universität Bonn)	Cosmological relaxation windows and observational constraints	Wednesday 12 <sup>th</sup> , 14:20 - 14:40
<b>Jaeckel, Joerg</b> (ITP, Heidelberg)	Developments in WISPy Dark Matter	Tuesday 11 <sup>th</sup> , 11:45 - 12:30
<b>Javanmardi, Behnam</b> (AlfA, Universität Bonn)	Testing the isotropy of the distribution of galaxy morphologies	Tuesday 11 <sup>th</sup> , 17:20 - 17:40
<b>Kahlhöfer, Felix</b> (DESY, Hamburg)	How to save the WIMP	Monday 10 <sup>th</sup> , 11:00 - 11:45
<b>Kramer, Michael</b> (MPI f. Radioastronomie, Bonn)	Gravity tested by binary pulsars	Thursday 13 <sup>th</sup> , 14:00 - 14:45
<b>Krippendorf, Sven</b> (University of Oxford, UK)	The String Soundcape at Gravitational Wave Detectors	Wednesday 12 <sup>th</sup> , 14:40 - 15:00
<b>Kuijken, Konrad</b> (Leiden University)	Probing Cosmology with weak gravitational lensing	Thursday 13 <sup>th</sup> , 09:00 - 09:45
<b>Leibundgut, Bruno</b> (ESO, München)	Distances to core-collapse supernovae	Wednesday 12 <sup>th</sup> , 15:00 - 15:20
<b>Lüst, Dieter</b> (LMU-München/MPI-München)	Classical and Quantum Black Hole Hair from Goldstone Modes	Tuesday 11 <sup>th</sup> , 14:45 - 15:30

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<b>Mantz, Adam</b> (Stanford University, US)	Cosmology with galaxy clusters	Thursday 13 <sup>th</sup> , 11:00 - 11:45
<b>McAllister, Liam</b> (Cornell University, US)	Axion Inflation in Quantum Gravity	Wednesday 12 <sup>th</sup> , 11:00 - 11:45
<b>Mohr, Joseph</b> (LMU-München)	Constraints on Growth of Structure from Galaxy Cluster Surveys	Thursday 13 <sup>th</sup> , 11:45 - 12:30
<b>Nielsen, Alex</b> (MPI für Gravitationsphysik, Potsdam)	Binary Black Hole Mergers in the first Advanced LIGO Observing Run	Friday 14 <sup>th</sup> , 11:45 - 12:30
<b>Percival, Will</b> (University of Portsmouth, UK)	Optimising cosmological information extraction from future galaxy surveys	Friday 14 <sup>th</sup> , 09:45 - 10:30
<b>Rajendran, Surjeet</b> (UC Berkeley, US)	ALPS and the Low Energy Frontier	Thursday 13 <sup>th</sup> , 14:45 - 15:30
<b>Ringwald, Andreas</b> (DESY, Hamburg)	A Minimal Model for Particle Physics and Cosmology	Tuesday 11 <sup>th</sup> , 11:00 - 11:45
<b>Rühle, Fabian</b> (DESY, Hamburg)	de Sitter vacua and SUSY breaking in higher-dimensional flux compactifications	Tuesday 11 <sup>th</sup> , 14:00 - 14:45
<b>Sánchez, Ariel</b> (MPI f. extraterrestrische Physik, Garching)	Cosmological analysis of the completed Baryon Oscillation Spectroscopic Survey	Friday 14 <sup>th</sup> , 11:00 - 11:45
<b>Sigl, Günter</b> (Universität Hamburg)	Astrophysical Messengers from the Cosmos	Monday 10 <sup>th</sup> , 14:45 - 15:30
<b>Smirnov, Alexei</b> (MPI f. Kernphysik, Heidelberg)	Status of Neutrino Physics	Tuesday 11 <sup>th</sup> , 09:00 - 09:45
<b>Springel, Volker</b> (ITS, Universität Heidelberg)	Hydrodynamical simulations of dark universes	Wednesday 12 <sup>th</sup> , 09:45 - 10:30
<b>Schrabback, Tim</b> (AlfA, Universität Bonn)	Weak gravitational lensing from space: Constraining the mass scale of distant galaxy clusters from the South Pole Telescope using Hubble Space Telescope observations	Thursday 13 <sup>th</sup> , 17:30 - 17:50
<b>Schumann, Marc</b> (Universität Bern, CH)	The direct search for dark matter-status and perspectives	Monday 10 <sup>th</sup> , 09:00 - 09:45
<b>Steinmetz, Matthias</b> (AIP, Potsdam)	Dark Matter in the Milky Way and the Local Group	Thursday 13 <sup>th</sup> , 16:45 - 17:30
<b>Tackmann, Kerstin</b> (DESY, Hamburg)	Recent results from the ATLAS experiment	Monday 10 <sup>th</sup> , 16:00 - 16:45
<b>Trautner, Andreas</b> (bctp, Universität Bonn)	Non-Thermal Cosmic Neutrino Background	Wednesday 12 <sup>th</sup> , 14:00 - 14:20
<b>Weiglein, Georg</b> (DESY, Hamburg)	Higgs and BSM phenomenology in view of the latest results from the LHC and cosmology	Friday 14 <sup>th</sup> , 09:00 - 09:45
<b>Westphal, Alexander</b> (DESY, Hamburg)	Runaway Relaxion Monodromy	Wednesday 12 <sup>th</sup> , 11.45 - 12:30
<b>Wetterich, Cristof</b> (ITP, Universität Heidelberg)	Scale symmetry - a link from quantum gravity to cosmology	Tuesday 11 <sup>th</sup> , 09:45 - 10:30
<b>Wolschin, Georg</b> (Universität Heidelberg)	Beyond the thermal model	Tuesday 11 <sup>th</sup> , 16:00 - 16:20
<b>Yankelevich, Victoria</b> (AlfA, Universität Bonn)	Cosmological forecast for the galaxy bispectrum with Euclid	Thursday 13 <sup>th</sup> , 17:50 - 18:10