



# Invisibles24 Workshop

## Monday, July 1, 2024

### Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (3:30 PM - 4:00 PM)

time	[id] title	presenter
3:30 PM	[13] Neutrino masses from new Weinberg-like operators	VATSYAYAN, Drona
3:35 PM	[22] Hidden in the background: BBN photodisintegration limits on relics decaying into neutrinos.	BIANCO, Sara
3:40 PM	[27] Relic $\nu$ Background boosted in Cosmic Reservoirs	DE MARCHI, Andrea Giovanni
3:45 PM	[61] Shedding light on the neutrino charge radius with CEvNS data	ATZORI CORONA, Mattia
3:50 PM	[8] Constraints on the Cosmic Neutrino Background from NGC1068	FRANKLIN, Jack
3:55 PM	[16] What is the wave packet size of neutrinos?	ALVES, Gustavo

### Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (6:00 PM - 6:30 PM)

time	[id] title	presenter
6:00 PM	[49] Going beyond cosmological bounds on the neutrino masses	BERTÓLEZ-MARTÍNEZ, Toni
6:05 PM	[44] Neutrino masses and $\nu\beta\beta$ decays in leptiquark models	SANTOS LEAL, Luighi Pierre
6:10 PM	[69] Exploring the Impact of Quantum Decoherence on Precision Measurements in DUNE and T2HK	Mr CALATAYUD-CADENILLAS, Anthony
6:15 PM	[70] Unstable Neutrinos: Addressing Oscillation and Decay	Mr PARKER, George
6:20 PM	[23] Heavy neutral lepton corrections to SM boson decays: lepton flavour universality violation in low-scale seesaw realisations	PINSARD, Emanuelle

## Tuesday, July 2, 2024

### Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (12:15 PM - 12:45 PM)

time	[id] title	presenter
12:15 PM	[19] Riding the dark matter wave: Novel limits on general dark photons from LISA Pathfinder	FRERICK, Jonas
12:20 PM	[40] Solar reflection of dark matter with dark-photon mediators	XU, Hailin
12:25 PM	[47] Topological Portal to the Dark Sector	SELIMOVIC, Nudzeim
12:30 PM	[57] Probing conversion-driven freeze-out at the LHC	RAMOS, Lucas
12:35 PM	[35] Not so inelastic Dark Matter	DALLA VALLE GARCIA, Giovanni
12:40 PM	[5] Cosmic-ray boosted dark matter confronted by constraints on new light mediators	SHAUKAT ALI, Iman

### Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (4:30 PM - 5:00 PM)

time	[id] title	presenter
4:30 PM	[4] ALP contribution to the Strong CP problem	ENGUITA-VILETA, Víctor
4:35 PM	[12] Preheating the String Axiverse	PUTTI, Margherita
4:40 PM	[20] The Chiral Lagrangian of CP-Violating Axion-Like Particles	LEVATI, Gabriele
4:45 PM	[42] HyperLSW: An ultimate experiment to determine the amount of dark matter axions	LUCENTE, Giuseppe
4:50 PM	[51] $\theta$ -dependence of $\alpha$ -decay half-lives	TONI, Claudio
4:55 PM	[54] Cogenesis of baryon and dark matter with PBH and QCD axion	DAS, Nayan

# Wednesday, July 3, 2024

## Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (12:45 PM - 1:15 PM)

time	[id] title	presenter
12:45 PM	[10] Vortex effects in merging Q-balls: a theoretical laboratory for merging black holes?	ZANTEDESCHI, Michael
12:50 PM	[11] Cosmological particle production and PBHs	MASSONI SALLA, Gabriel
12:55 PM	[15] Exploring cosmological phase transitions with pulsar timing arrays	TASILLO, Carlo
1:00 PM	[56] Quantisation Across Bubble wall and Friction	BARNI, Giulio
1:05 PM	[24] High Frequency Gravitational Wave Bounds from Galactic Neutron Stars	DANDOY, Virgile
1:10 PM	[67] High-frequency gravitational waves in the geometrical optics approximation	MARSILI, Luca

# Thursday, July 4, 2024

## Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (10:30 AM - 11:00 AM)

time	[id] title	presenter
10:30 AM	[58] Axion-Like Particles in Radiative Quarkonia Decays	PONCE DIAZ, Xavier
10:35 AM	[37] ALP leptogenesis	CATALDI, Martina
10:40 AM	[43] GeV ALP from TeV Vector-like Leptons	FUENTES ZAMORO, Marta
10:45 AM	[33] Fusing photons into nothing, a new search for invisible ALPs and Dark Matter at Belle II	ACANFORA, Francesca
10:50 AM	[26] White dwarf cooling through neutrinos and $L_{\mu} - L_{\tau}$	HOEFKEN ZINK, Jaime
10:55 AM	[38] Tri-hypercharge and tri-unification: a path to the origin of flavour	FERNÁNDEZ NAVARRO, Mario

## Young Scientist Forum - Aula Giorgio Prodi - San Giovanni in Monte, University of Bologna (12:30 PM - 1:00 PM)

time	[id] title	presenter
12:30 PM	[21] Freeze-in at stronger coupling and the highest temperature in the Universe	COSTA, Francesco
12:35 PM	[31] Twenty Thousand Leagues from the QCD Axion Band	DE GIORGI, Arturo
12:40 PM	[28] Flavour Non-Universal Extensions of the Standard Model	PESUT, Marko
12:45 PM	[34] Model Independent test for T-violation with T2HK and DUNE	Ms SHARMA, Kiran
12:50 PM	[53] Loop Blow-Up Inflation: a new inflationary model from string theory	BRUNELLI, Luca
12:55 PM	[68] Testability of Inflection Inflation In Colliders	Mr BURK, Francis Marston