



# Quarkonia meet Dark Matter

## Tuesday 15 June 2021

**Main program: Welcome, Opening Remarks** - Remote access (19:55 - 20:00)

**Main program: Overview** - Remote access (20:00 - 21:20)

time	[id] title	presenter
20:00	[3] Electroweakly-interacting dark matter	HISANO, Junji
20:40	[4] Dark matter bound states	PETRAKI, Kallia

**Main program: Overview** - Remote access (21:40 - 23:00)

time	[id] title	presenter
21:40	[5] Pair annihilation and bound states in a thermal plasma	LAINE, Mikko
22:20	[6] Quarkonium in medium: a NR EFT approach to dissociation and recombination	VAIRO, Antonio

# Wednesday 16 June 2021

**Main program: Finite temperature status DM, Effective field theories: non-relativistic and potential non-relativistic -****Remote access (20:00 - 21:20)**

time	[id] title	presenter
20:00	[7] Non-equilibrium theory of non-relativistic pairs inside an environment	BINDER, Tobias
20:40	[8] Potential non-relativistic QCD and open quantum system description of the non-equilibrium evolution of quarkonium inside the medium	ESCOBEDO ESPINOSA, Miguel Ángel

**Main program: Open quantum system treatment, Experiment - Remote access (21:40 - 23:00)**

time	[id] title	presenter
21:40	[9] Quarkonium production in pp and heavy ion collisions	MEHEN, Tom
22:20	[10] Nuclear modification of open heavy flavor and quarkonia production in heavy ion collisions	KE, Weiyao

# Thursday 17 June 2021

**Main program: High temperature DM Sommerfeld enhancement and bound state decay, EFT, NLO zero and finite T non-abelian bound state formation at low temperature - Remote access (20:00 - 20:55)**

time	[id] title	presenter
20:00	[11] Dark matter and coloured co-annihilators: from the relic density to experimental constraints	BIONDINI, Simone
20:30	[12] Chromoelectric field correlator for quarkonium transport and thermal dark matter relic abundance	SCHEIHING HITSCHFELD, Bruno

**Main program: Precision WIno and indirect detection, Minimal and colored co-annihilating Dark Matter, Higgs contributions - Remote access (21:10 - 22:50)**

time	[id] title	presenter
21:10	[13] Electroweak WIMP annihilation, resummed beyond LO with non-relativistic dark matter EFT and SCET	BENEKE, Martin
21:50	[14] Bound-state effects in EW and colored co-annihilation and unitarity bound	SMIRNOV, Juri
22:20	[15] Higgs enhancement and bound state formation in coannihilation scenarios of dark matter	HARZ, Julia

# Friday 18 June 2021

**Main program: Non-perturbative bound state systems, monopole transitions - Remote access (20:00 - 21:05)**

time	[id] title	presenter
20:00	[16] Thermal Squeezeout for Strongly Interacting Dark Matter	SLATYER, Tracy
20:40	[17] Monopole transitions via emission of a charged scalar and their importance for dark matter coupled to the Higgs	PETRAKI, Kallia

**Main program: Hydro and lattice simulation - Remote access (21:20 - 22:40)**

time	[id] title	presenter
21:20	[18] Bottomonium suppression in heavy ion collisions	STRICKLAND, Michael
22:00	[19] Strongly interacting systems at finite T: results from the lattice	ROTHKOPF, Alexander

**Main program: Closing remarks - Remote access (22:40 - 22:50)**