

Models of Modern Physics

PROGRAM

black ink: core school lectures, 60 minutes each

blue ink: workshop talks, discussions, problems classes

Sunday 11 Sep 2022

optimal arrival time: between 17:00 and 18:00 (5pm to 6pm), other times are OK too, just let us know if you are coming after 21:00 or on Monday or later

Monday 12 Sep 2022

9:00 – Organisers' Welcome

9:15 – Juraj Hašík: Physics in 1D through the lens of tensor networks - 1

10:45 – Juraj Hašík: Physics in 1D through the lens of tensor networks - 2

13:00 – **An Invitation to Hiking in The Low Tatras** [*weather dependent*]

20:00 – **informal evening programme**

Tuesday 13 Sep 2022:

9:00 – Andreas Trautner: An Introduction to the Standard Model - 1

10:30 – Andrej Gendiar: Specific Properties and Applications of Tensor Networks

HIKING AFTERNOON: An Invitation to Hiking in The High Tatras

Wednesday 14 Sep 2022:

9:00 – Andreas Trautner: An Introduction to the Standard Model - 2

10:30 – Tomáš Blažek: Particle Physics News 2022

14:00 – Andreas Trautner: An Introduction to the Standard Model - 3

16:30 – **Problems Classes / Discussion** [*optional*]

20:00 – short talks, 20 min each

Mária Poláčková: Active Brownian Motion

Viktor Zaujec: Uncertainty Relations at Finite Temperature

21:00 - Amina Khatun (*informal*): India

Thursday 15 Sep 2022

9:30 – Ice Cave trip departure

15:00 – Andreas Trautner: An Introduction to the Standard Model - 4

16:30 – Problems Classes / Discussion [*optional*]

20:00 – short talks, 20 min each

Mariia Petropavlova: Towards Interferometry of Neutrino Electromagnetism

Denisa Lampášová: Complexity Zoo for Physicists

21:00 - Andrej Gendiar (*informal*): Japan

Friday 16 Sep 2022

9:00 – Martin Krššák: Teleparallel Theory: Gravity as Torsion

10:30 – Juraj Tekel: A Less Commutative View of the Standard Model

11:30 - Samuel Kováčik: tba

free afternoon

20:00 – evening programme will be announced if enough people stay overnight for hiking on Saturday

Saturday 17 Sep 2022

An Invitation to Hiking (recommended in good weather) in The High or Low Tatras