# *Physics beyond the Standard Model: Modern Approaches*

**– Program –**

**Monday afternoon**
13:00-14:00 Zoltán Trócsányi: Introduction: status of particle physics
14:00-15:45 András László: Group theory and SM extensions
15:45-16:00 *Coffee Break*
16:00-18:00 Gábor Cynolter: Standard model effective field theory (SMEFT)

**Tuesday morning**
09:00-10:00 Márton Bartók: Particle Hunters' Guide: how to discover or exclude a BSM model at the LHC
10:00-11:15 Gabriella Pásztor: Hints for new physics from SM precision measurements: experimental investigation
11:15-11:30 *Coffee Break*
11:30-12:30 Dezső Horváth: Searches for SUSY at the LHC
**Tuesday afternoon**
13:30-14:30 Sho Iwamoto: SUSY phenomenlogy at the LHC 1
14:30-15:30 Sho Iwamoto: SUSY phenomenlogy at the LHC 2
15:30-15:45 *Coffee Break*
15:45-16:45 Zsolt Szép: EWBG Basics
16:45-18:00 András Patkós: Matter-antimatter asymmetry of the Universe – Evidence and new ideas in a simple SM extension

**Wednesday morning**
09:00-11:00 Zoltán Trócsányi: Super-weak force
11:00-11:15 *Coffee Break*
11:15-12:30 Josu Hernandez: Neutrino oscillation experiments and theory
**Wednesday afternoon**
13:30-15:30 Zoltán Péli: Particle physics model of inflation
15:30-15:45 *Coffee Break*
15:45-17:00 Timo Kärkkäinen: Neutrino mass
17:00-18:00 Timo Kärkkäinen: Neutrino mass models

**Thursday morning**
09:00-10:00 Josu Hernandez: Effective approach to neutrino interactions, absolute mass scale of neutrinos and leptogenesis
10:00-11:00 Károly Seller: Cosmology
11:00-11:15 *Coffee Break*
11:15-12:30 Károly Seller: Neutrino dark matter
**Thursday afternoon**
13:30-14:45 Timo Kärkkäinen: Introduction to SARAH
14:45- Discussion with lecturers on any of the subjects

**Friday morning**
09:00-11:00 Dániel Nógrádi: Composite Higgs models
11:00-11:15 *Coffee Break*
11:15-12:15 Tamás Csörgő: Evidence of Odderon-exchange from scaling properties of elastic scattering at TeV energies
12:15-12:45 István Szanyi: Observation of Odderon Effects at LHC energies - A Real Extended Bialas-Bzdak Model Study