

STUDENT WORKSHOP 2018

SM & QCD

**by Roman Pasechnik
(University of Lund, Sweden)**

Welcome

Marek Taševský (Fyzikální ústav AV ČR)

Topics of student workshops

❑ 2015: Jet physics

Dr. Gregory Soyez (Paris)

indico.cern.ch/event/441794

❑ 2016: Heavy-ion Physics

Dr. Cyrille Marquet (Paris)

indico.cern.ch/event/561710

❑ 2018: SM & QCD

Dr. Roman Pasechnik (Lund)

indico.cern.ch/event/758588

Excellent lecturers.

Real experts.

Nice student presentations.

Lively discussions.

Roman Pasechnik

- ❖ Very broad scope of expertise and interests:

QCD (Hard & Soft)

Diffraction and Exclusive processes

Heavy Quarkonia

Dark Matter

Astroparticle physics

Stability and Dynamics of Vacuum in SM

Dark Energy

Cosmological Perturbation Theory

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- ❖ Teaching at Lund University

- ❖ Member of several committees

- ❖ Supervising students

- ❖ Frequent speaker at conferences & schools

Purpose of the workshop

1. Deepen knowledge about SM, QCD and Diffraction from one of the experts in the field
2. Share knowledge and results with fellow students, senior colleagues and experts
3. Feel the conference atmosphere

Do not hesitate to ask even during presentations! Speakers are usually very happy being asked because it proves their presentation makes people interested.

❖ Monday 08/10/2018: 09.30-13.10 (Institute of Physics of ASCR)

- ❑ Marek Biroš: Study of rare B-meson decays at ATLAS [Bachelor]
- ❑ Lukáš Marek: Alpha_S measurements [Research Task]
- ❑ Robert Líčeník: Production of D⁺/D⁻ mesons in heavy-ion collisions [Diploma]
- ❑ Martin Krivoš: Study of charmonium in pp and heavy-ion collisions in ATLAS [Diploma]
- ❑ Artem Isakov: Performance of the b-tagging algorithm in ALICE [Diploma]
- ❑ Roman Lavička: Coherent J/Psi photoproduction in ultraperipheral PbPb collisions with ALICE [Diploma]
- ❑ Petr Baroň: Measurement of top quark spectra with ATLAS [Diploma]
- ❑ Ondřej Hladík: Measurement of inclusive jets and dijets with ATLAS [PhD]
- ❑ Petr Jačka: Boosted large-R jets in top-quark pair production with ATLAS [PhD]
- ❑ Lukáš Kramárik: Effects of cold nuclear matter on charm meson production [PhD]

❖ Monday 08/10/2018: 15.00-16.20 (Institute of Physics)

❑ Lecture: Dr. Roman Pasechnik: High-energy scattering in QCD

❖ Tuesday 09/10/2018: 09.30-12.30 (Institute of Physics)

❑ Lecture: Dr. Roman Pasechnik: Deep Inelastic Scattering and QCD Factorization

❑ Lecture: Dr. Roman Pasechnik: Diffraction Scattering and Soft QCD