

Welcome to

Resummation Evolution Factorization 2018



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IFJ PAN

*The institute has been established in 1955 thanks to Henryk Niewodniczański.
IFJ PAN is currently the largest research institute of the Polish Academy of Sciences.
The IFJ is a top level research center in Poland in the field of sciences and engineering*

- it offers good scholarships for PhD students,*
- scientists working here numerous research grants, and international scholarships*

The divisions:

Particle and Astroparticle Physics,

Nuclear Physics and Strong Interactions

Condensed Matter Physics,

Theoretical Physics

Application of Physics and Interdisciplinary Research

The Cyclotron Centre Bronowice (CCB) is the part of the Institute which serves as a clinical center e.g. cancer treatment

The Department of the organizers

Department of Particle Theory (Theory Division)

- *LHC physics, strong and weak interactions*
- *FCC physics, EIC physics, theory, phenomenology, effective models, resummation*
- *NNLO calculations for LHC processes*
- *Monte Carlo generators for LHC physics, TMD's, Heavy Ions*
- *Development of Monte Carlo generators for physics at NLO accuracy*
- *automation of calculations of matrix elements for scattering at high energies*

A few practical points ...

Registration

*if you did not pay and you should, please do it
ask the secretary for confirmation of payment*

Talks & slides

upload talks via indico

Lunches and coffee breaks

in a room next to the canteen. Level -1. Follow organizers

Info about dinner will be provided on Wednesday

Tutorial on Friday

*you will get temporary DESY account and file with pre-installed software
to take home*

email of secretary

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The purpose and possible outcome

Possibly see further links between frameworks that address TMD physics i.e. CSS, SCET, HEF, ITMD, CGC, quasi PDFs, quasi TMD's. Are there any model assumptions beyond QCD ?

What does description of so to say universal observables, like Drell-Yan, for all the formalisms tell us?

Find new observables that are particularly useful to test the formalisms

Dedicated discussion sessions where existing theory, phenomenology, experimental problems, could be discussed.

What is needed to make progress in theory/phenomenology of TMD's and high precision physics?

Hands-on work with existing software. Feedback on practical aspects of the software are welcomed!

Enjoy the workshop !