

Workshop on
“Parton Showers, Event Generators and Resummation Workshop (PSR19)”
June 11 – 14, 2019

organized by
Simon Plätzer (U Vienna)

• **Tuesday, June 11, 2019**

09:00 – 09:30 **Registration**

09:00 – 09:45 **Welcome**

09:45 – 10:25 **Steffen Schumann**

Parton Showers and Event Generators Overview

10:25 – 10:55 *Coffee / Tea break*

10:55 – 11:35 **Thomas Becher**

Resummation Overview

11:35 – 12:15 **Kirill Melnikov**

Progress in Subtraction Schemes

12:15 – 13:45 *Lunch break*

13:45 – 14:10 **Jack Holguin**

Parton Branching at Amplitude Level

14:10 – 14:35 **Zoltan Nagy**

Color Evolution in Parton Showers

14:35 – 15:00 **Matthew De Angelis**

News on Colour Evolution with CVolver

15:00 – 15:30 *Coffee / Tea break*

15:30 – 15:55 **Stefan Keppeler**

Multiplet bases – why and why not?

15:55 – 16:20 **Marek Schoenherr**

Electroweak Corrections and Parton Showers

16:20 – 16:45 **Peter Skands**

Coherent Showers in Coloured Resonance Decays

16:45 – 17:00 *Discussion*

17:00 – 18:00 *Blackboard Session - Blackboard Hallway*

18:15 – 19:45 *Welcome Drinks - SummerStage - Wiener Weinpavillon*

• **Wednesday, June 12, 2019**

- 09:00 – 09:25 **Jimmy Olsson**
Resampling Algorithms for High Energy Physics Simulations
- 09:25 – 09:50 **Christian Bauer**
A Quantum Algorithm for High Energy Physics Simulations
- 09:50 – 10:15 **Judith Alcock-Zeilinger**
Constructing Hermitian Young Operators
- 10:15 – 10:45 *Coffee / Tea break*
- 10:45 – 11:10 **Andreas Papaefstathiou**
Exploring Higher Dimensional Resummation
- 11:10 – 11:35 **Markus Diehl**
Double Parton Scattering: Theory Developments
- 11:35 – 12:00 **Jennifer Smillie**
High Energy Jets
- 12:00 – 14:00 *Lunch break and Discussion*
- 14:00 – 14:25 **Johannes Bellm**
Jet Cross Sections at the LHC and the Quest for Precision
- 14:25 – 14:50 **Richard Ruiz**
Event-based Jet Vetoes
- 14:50 – 15:15 **Francesco Hautmann**
TMDs from Parton Branching
- 15:15 – 15:45 *Coffee / Tea break*
- 15:45 – 16:10 **Mrinal Dasgupta**
Top Tagging
- 16:10 – 16:35 **Chang Wu**
Jet Pull
- 16:35 – 17:00 *Discussion*
- 17:00 – 19:00 *Vienna Visit - Downtown Vienna*
- 19:00 – 22:00 *Common Dinner at Heurigen Schübel-Auer*

• **Thursday, June 13, 2019**

- 09:00 – 09:25 **Wouter Waalewijn**
The Jet Shape at NLL'
- 09:25 – 09:50 **Iain Stewart**
Collinear Drop
- 09:50 – 10:15 **Dingyu Shao**
Jet TMDs and Non-global Logarithms
- 10:15 – 10:45 *Coffee / Tea break*
- 10:45 – 11:10 **Luke Arpino**
ARES for Three-jet Event Shape
- 11:10 – 11:35 **Rudi Rahn**
SoftServe
- 11:35 – 12:00 **Daniel Reichelt**
Resummed Predictions for Jet Resolution Scales
- 12:00 – 14:00 *Lunch break and Discussion*

14:00 – 14:25 **Sebastian Jaskiewicz**
Factorization at Next-to-leading Power

14:25 – 14:50 **Leonardo Vernazza**
Resummation of NLP LLs near Threshold

14:50 – 15:15 **Eric Laenen**
NLP Threshold Logarithms at NLO and All Orders

15:15 – 15:45 *Coffee / Tea break*

15:45 – 16:15 **Bryan Webber**
Outlook

16:15 – 16:30 *Farewell (I)*

● **Friday, June 14, 2019**

09:00 – 09:10 *Welcome*

09:10 – 09:40 *Motivation and Overview*

09:40 – 10:10 **Andrea Banfi**
Hadronization Corrections with ARES

10:10 – 10:30 *Discussion*

10:30 – 11:00 *Coffee / Tea break*

11:00 – 11:30 **Stefan Gieseke**
Soft Models in Herwig

11:30 – 12:30 *Discussion*

12:30 – 14:00 *Lunch break*

14:00 – 14:30 **Aditya Pathak**
Characterizing Event Generator Hadronization Models with Groomed Jet Mass

14:30 – 15:00 **Cody Duncan**
Spacetime Colour Reconnection

15:00 – 15:30 *Discussion*

15:30 – 16:00 *Coffee / Tea break*

16:00 – 16:30 *Discussion*

16:30 – 16:45 *Conclusion and Farewell (II)*

The takes from Tuesday to Thursday will take place at the ESI, Boltzmann Lecture Hall. The talks on Friday will take place in the Schrödinger Lecture Hall!