

Verein zur Förderung der Theoretischen Physik in Österreich

# EINLADUNG

zur 4. Vorlesung im Rahmen der Erwin-Schrödinger-Gastprofessur 2024

**Matthias NEUBERT**  
(Johannes Gutenberg-Universität Mainz)

## *“Factorization restoration through Glauber gluons“ / Part II*

### **Abstract:**

I will discuss new insights into the low-energy dynamics of gap-between-jets cross sections at hadron colliders, for which phase factors in the hard amplitudes spoil collinear cancellations and lead to double (“super-leading”) logarithmic behavior. Based on a method-of-regions analysis, we have identified three-loop contributions from perturbative active-active Glauber-gluon exchanges with the right structure to render the cross section consistent with PDF factorization below the gap veto scale. These Glauber contributions are unambiguously defined without regulators beyond dimensional regularization.

**Zeit: Dienstag, 29.10.2024, 16:15h**

**Ort: Erwin-Schrödinger-Hörsaal, Boltzmannngasse 5, 5. Stock**

### **Zoom Meeting:**

Meeting ID: 933 4269 3866 Passcode: 185096

<https://univienne.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVVBQT09>

gez.: A. Hoang, H. Neufeld, M. Procura

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