

**Verein zur Förderung der Theoretischen Physik in Österreich**

# **E I N L A D U N G**

zur 2. Vorlesung im Rahmen der

**Schrödinger-Gastprofessur 2023**

von

**Gian Giudice**

(CERN, Schweiz)

über

***“Self-organised localisation“***

**Abstract:**

The phenomenon of self-organised localisation is presented. When the fundamental parameters of a theory are functions of a scalar field subject to large fluctuations during inflation, quantum phase transitions can act as dynamical attractors. As a result, the theory parameters are probabilistically localised around the critical value and the Universe finds itself at the edge of a phase transition. Examples will be given in which self-organised localisation accounts for the observed near-criticality of the Higgs self-coupling, the naturalness of the Higgs mass, or the smallness of the cosmological constant.

**Zeit:** Dienstag, **13. Juni 2023, 16.15**

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

Join Zoom Meeting

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

Meeting ID: 933 4269 3866 - Passcode: 185096

gez. A. Hoang, H. Neufeld

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