



# PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik der Goethe-Universität Frankfurt

Mittwoch, den 03.05.2023, 16 Uhr c.t.

Großer Hörsaal, Raum \_0.111, Max-von-Laue-Str. 1

in PRÄSENZ und per ZOOM-Link:

<https://uni-frankfurt.zoom.us/j/91554812655?pwd=Q2xuZkNtbINyTExmR0hBNU1DMXVLZz09>

## Prof. Dr. Claudius Gros

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### **Attention, transformer & Chat-GPT: The second Galilean revolution in the making? What the hype is about.**

The introduction of the attention mechanism 2014/17 initiated an AI revolution. Instead of classical deep neural networks, large language models are based nowadays on 'transformer' architectures implementing the "attention is all you need" paradigm. In this lecture an overview of state-of-the-art machine learning concepts is presented. The aim is an understanding of 'Generative Pretrained Transformers', the basis of ChatGPT. The possible functional similarity of active information routing in foundation models and in the brain is discussed. How likely is the advent of the second Galilean revolution, in this view, namely that the human brain will lose its hitherto unique position?

Die Dozentinnen und Dozenten der Physik

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