

Universität Regensburg

FACULTY OF HUMAN SCIENCES Chair of Cognitive Neuroscience

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Guest Lecture Thursday, 16.11.2023, 16:15 — 17:45 Room: H9 (Zentrales Hörsaalgebäude)

Title: Deep neural networks as scientific models of vision

Speaker: Prof. Radek Cichy

Freie Universität Berlin, Department of Education and Psychology, Neural

Dynamics of Visual Cognition

Abstract

Artificial deep neural networks (DNNs) are used in many different ways to address scientific questions about how biological vision works. In spite of the wide usage of DNNs in this context, their scientific value is periodically questioned. I will argue that DNNs are good in three ways for vision science: for prediction, for explanation, and for exploration. I will illustrate these claims by recently published or still ongoing projects in the lab. I will also propose future steps to accelerate progress.

