



Cognitive Science Colloquium

Summer term 2024

Tuesday 12.15 – 13.15 h; Lecture Hall 08, Neue Aula

When	What
30.04.2024 12.15 – 13.15	<p>Prof. Andreas Nieder (University of Tübingen): The Magical Number Zero: Its History, Ontogeny, Phylogeny, and Neuronal Representation</p> <p>Zero is a magic number. It represents emptiness, nothing, yet it stands as one of humankind's greatest cultural achievements, pivotal in numerous mathematical and scientific breakthroughs. However, zero has long been shrouded in mystery, its abstract nature posing a significant challenge. Recent studies from various disciplines now offer insights into the emergence of such an abstract concept. This talk will explore the prerequisites and precursors of understanding zero across four interconnected levels. It will begin by examining the discovery of the number zero in human history, then delve into its development in human ontogeny. Next, it will trace its evolution throughout animal phylogeny, and finally, elucidate how the brain conceptualizes "nothing" into an abstract zero category. It is argued that the emergence of zero progresses through four corresponding stages in all of these realms. Therefore, the talk is not only topical but also highly interdisciplinary and should appeal to a broad scholarly audience.</p>

Organisation: Elisabeth Hein and Volker Franz

Welcome to everybody!