

EINLADUNG ZUM KOLLOQUIUM

James Fraser

(Wuppertal)

„Underdetermination, Theoretical Overlap and Social Construction“

Underdetermination of theory by empirical evidence has long been a central argument for scientific anti-realism, of both empiricist and social constructivist varieties. This talk puts forward a defense of scientific realism based on the idea that, while underdetermination is ubiquitous in the sciences, underdetermined theories typically agree (or overlap) on many of their descriptive claims, so we need not draw a wide-reaching skeptical conclusion. I go on to reflect on the relationship between epistemic and sociological perspectives on scientific theorizing. One area where sociological investigation feeds into my suggested response to underdetermination arguments is on the question of how the structure of the scientific community affects the efficiency at which the space of empirically viable theories is explored. I illustrate the discussion with reference to case studies in the history of high energy physics and the interpretation of quantum mechanics.

James Fraser is a postdoctoral fellow with the “Epistemology of the Large Hadron Collider” research unit, based at the University of Wuppertal. He completed his PhD in the philosophy of science at the University of Leeds and held postdoctoral positions at the University of Pittsburgh, Max Planck Institute for History of Science, and the University of Durham. James works on the history and philosophy of physics, especially post-war high energy theory, and on topics in general philosophy of science, such as the scientific realism, explanation and scientific modelling debates.

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16:30 Uhr

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