

GP 6: Orte und Theorien

Time: Tuesday 14:00–15:45

Location: HSZ 105

Invited Talk

GP 6.1 Tue 14:00 HSZ 105

The Joint Institute for Nuclear Research and Cold War science diplomacy — •KARL HALL — Central European University

Shortly after war's end a Soviet scientist toured German institutions and reported, "Russia emerged victorious from the war thanks to the courage and heroism of its people and the high level of its science and technology. All of this forces the Germans to take an interest in the Russian people and its science, which has succeeded in smashing German militarism and showing the superiority of our system of labor organization and government." That early confidence gave way after 1949 to more complex diplomatic challenges on two fronts, as the Soviet Union sought to project an image of peaceful atomic capabilities in the West with the help of politically reliable physicists (Geneva 1955), while also cultivating scientific ties between the Soviet Academy of Sciences and the scientific institutions of the newly socialist countries of East Central Europe. The responses of Czech, Polish, Hungarian, and East German scientists were by no means uniform, and even in cases of strong bilateral interest there were many obstacles to collaboration. The Joint Institute for Nuclear Research in Dubna eventually became the highest profile scientific collaboration in the Warsaw Pact, and the story of its formation in the wake of these halting international initiatives will dominate this brief narrative of early Soviet science diplomacy during the Cold War.

GP 6.2 Tue 14:45 HSZ 105

Kopenhagen vor und nach dem Zweiten Weltkrieg — •CHRISTIAN JOAS — Historisches Seminar, LMU München

"Kopenhagen": Wenige Ortsbezeichnungen rufen bei PhysikerInnen stärkere Assoziationen hervor. Niels Bohrs Institut war in der Zwischenkriegszeit nicht nur ein zentraler lokaler Kontext der Genese der Quantenmechanik, die Stadt lieh auch der lange dominanten Interpretation der Quantenmechanik ihren Namen. Forscher aus aller Welt besuchten Bohrs Institut oder forschten an ihm, zunächst zur Atomstruktur und zur Quantenphysik, ab den 1930er Jahren vermehrt auch zur Kernphysik. Weniger bekannt ist, dass Kopenhagen auch in der Nachkriegszeit eine herausgehobene Stellung einnahm. Niels Bohrs Sohn Aage Bohr begründete in den 1950er Jahren seine eigene "Kopenhage-

ner Schule": Auf dem Feld der Kernstrukturphysik wurde Kopenhagen zum Sammelpunkt von Forschern aus Europa, Nordamerika und der Sowjetunion. Profitierte Aage Bohr dabei einfach vom etablierten Prestige der von seinem Vater begründeten Institution, oder schuf er einen eigenen Kontext kreativer physikalischer Forschung? Mein Vortrag untersucht komparativ die Bedingungen der Wissensproduktion in Kopenhagen vor und nach dem Zweiten Weltkrieg aus globalhistorischer Perspektive. Dabei gehe ich insbesondere auf die spezifischen Mittlerrollen Kopenhagens vor und nach dem Zweiten Weltkrieg ein. Außerdem werde ich zeigen, dass die Kopenhagener Kernstrukturphysik der Nachkriegszeit ein wichtiger Teil eines neuen Forschungsparadigmas war, das eng verwoben war mit auf der renormierten Quantenelektrodynamik aufbauenden neuen Entwicklungen in der Vielteilchentheorie.

GP 6.3 Tue 15:15 HSZ 105

Multiple galaxies, many voices: the changing configurations of a thought collective in observational cosmology — •KARIN PELTE — Technische Universität Berlin

Considering the import-export dynamics which underlay most research sites of 20th century observational cosmology and the varying influence of states, "transnational" sums it up well, yet another concept is needed for an analysis. I chose to put to work Ludwik Fleck's "thought collective". It defines communication between its members as the main prerequisite and the central place for the development, transformation and establishment of both scientific knowledge as well as the scientific community itself; institutions, affiliations and, to a lesser degree, nations, represent mere instances amongst a multitude of overlapping, more or less binding thought collectives.

Post-war observational cosmology has been presented mostly by participating western scientists and, consequently, follows a West-Side Story narrative. In my talk, I will sketch out an overview of the said research strand highlighting contributions by Soviet Russian and Armenian, Swedish and possibly Indian actors. In order to support my investigation at this early stage, I will present a formal citation network analysis. The positions these players i.e. their publications take within the larger visualized citation network at different phases of the development should support further analysis of the transformation of knowledge within the changing configurations of the thought collective.