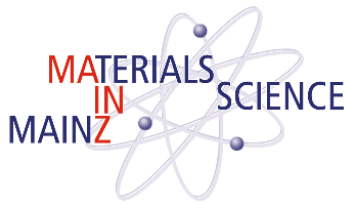




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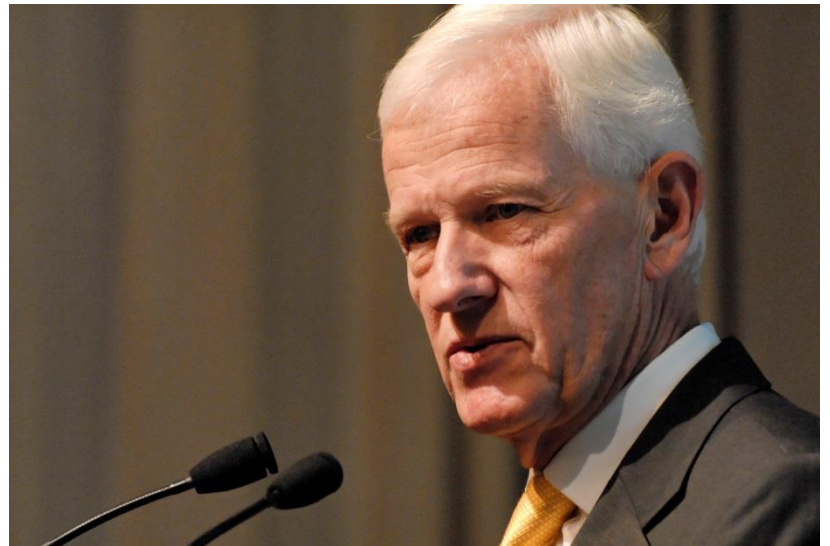
Physics Colloquium Mainz

Tuesday, 28. Januar 2020

Institute for Nuclear Physics
Lecture Hall
Johann-J.-Becher-Weg 45

4.15pm Tea from 3.45pm

*Professor Dr. Manfred Popp
Karlsruher
Institut für Technologie*



What Pre-empted Hitler's Atomic Bomb? Nuclear Physics during World War II in Germany

The current historical narrative, the German physicists had worked on nuclear weapons for Hitler, but the effort to develop an atomic bomb would have exceeded the economic power of the "Third Reich", will be discussed from the view of a physicist. After a brief look into the physics of a nuclear reactor and a nuclear explosive, the lecture will provide answers to the following questions: Was an atomic bomb really economically unattainable? Why did the German physicists not succeed to demonstrate the neutron chain reaction? Why did they not try to measure natural constants needed for the design of a bomb? Why had the Heidelberg cyclotron project a low priority and why was the most modern cyclotron in occupied Copenhagen not seized for the Uranium Project? Finally, the resulting question is whether the conclusions of the historians are scientifically convincing.