

Fifty Years of Nuclear Fission

Seminar veranstaltet von
Yehuda Elkana und Erwin Hiebert
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Teilnehmer: Edoardo Amaldi (Rom), Henry H. Barschall (Wisconsin, Madison), Peter Brix (Heidelberg), Yehuda Elkana (Jerusalem), Erwin N. Hiebert (Harvard), Jürgen Kocka (Berlin), Christoph Meinel (Hamburg), Karl von Meyenn (Barcelona), John S. Rigden (Missouri), Silvan S. Schweber (Brandeis University), Yao Shuping (Beijing), Gunter S. Stent (Berkeley), Elisabeth Ströker (Köln), Roger Stuewer (Minnesota), Hans A. Weidenmüller (Heidelberg).

On the initiative of the Wissenschaftskolleg a small international workshop was convened, just before the scientific Conference held by the Hahn-Meitner Institute to discuss the social, political and in general humanistic aspects of the momentous discovery by Otto Hahn and Lise Meitner that changed the political and moral frame of mankind. The scholars that gathered, all of international standing, some historians of science, others philosophers of science, yet others from among the original scientific contributors to the developments in Physics in those days, dedicated their time and thoughts to a deeper understanding of the chain of ideas that led to the discovery; to the concatenation of events that brought two emigré scientists of the calibre of Lise Meitner and her nephew Otto Frisch to meet and compare the diverging scientific traditions which they represented and the conflation of which was the indispensable precondition for making the conceptual jump; that impact of the discovery on neighbouring scientific disciplines like biology; the socio-political impact of the creation of the bomb; the moral and humane implications; moreover the portentous developments that occurred under the heading of 'big science' — namely the need for a total reorganization of scientific research in view of the new developments. All this and more emerged some of it for the first time in a concerted fashion to clarify the previously often hazy picture. The work of other great physicists was studied in connection with the new ideas about the nucleus of the atom and their mutual influences were looked into.

In addition to the cognitive aspects, there were also warm friendly dis-

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cussions between scholars from different countries and different disciplines which will also in the future bring about further contacts and collaborative efforts.

Beiträge:

- Elisabeth Ströker: „Die Atomkernspaltung: Ein Rückblick auf ihre Vorgeschichte und Entdeckung"
- Erwin N. Hiebert: „Fin-de-Siècle Transformation of Physics"
- Roger Stuewer: „The Origins of the Liquid Drop Model of the Nucleus"
Gunther S. Stent: „A New Research Program for Biology"
- John S. Rigden: „Fission, Physicists, and the Ideals of Science: Actions, Choices, Losses, Meanings"
- Yao Shuping: „The Cultivation of Nuclear Physics in China since the 1930's"
- Silvan S. Schweber: „A New Type of Organization of Research"
- Karl von Meyenn: „The Pauli-Bohr Controversy on the Responsibility of Scientists"
- Jürgen Kocka: „Some general observations".