

GENEALOGY DATABASE ENTRY

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Sommerfeld, Arnold Johannes Wilhelm

1868 - 1951

DEGREE: PhD

DATE: 1891

PLACE: Königsberg

TEACHER/RESEARCH ADVISOR: Lindemann, C. L. F.

studied boundary-value problems, such as the propagation of electromagnetic waves along wires of finite diameter and the diffraction of X-rays by a wedge-shaped slit; investigated the hydrodynamics of viscous fluids, attempting to explain the onset of turbulence and discovering a theory of the lubrication of machines; predicted the phenomenon of Bremsstrahlung, the preferential forward-directed emission of light by electrons decelerated from relativistic velocities; important contributor to the development of quantum mechanics, esp. the non-circular orbit model of the Bohr atom.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 12, p525-532.
2. *Obit. Not. Fell. Roy. Soc.* **1952-53**, 8, 275-296.
3. *Am. J. Phys.* **1949**, 17, 312-316.
4. *Science* **1951**, 114, 383-384.
5. *Gesammelte Schriften*; Sauer, F., Ed.; Friedrich Vieweg & Sohn: 1968.