

LadHyX Seminar – March 6th, 10:45

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Fluid Mechanics in France in the First Half of the Twentieth Century

If one opens today a textbook on fluid mechanics, it seems that whereas French scientists of the eighteenth and nineteenth centuries are frequently mentioned, those from more recent times occur rarely; in particular, French contributions to the major breakthroughs of the first half of the twentieth century (boundary layers and turbulence) would appear quite modest. However, study of contemporary documents (PhD theses, journals, correspondence) reveals remarkable work undertaken by outstanding personalities. A key instigator of these achievements was the Air Ministry, which, from 1929, and with great open-mindedness, created and generously financed four institutes of fluid mechanics and five teaching centers in faculties of science. This reveals the 1930s in their true light as a fruitful decade, with achievements that explain the prominent role played by France in the creation in 1946 of the International Union of Theoretical and Applied Mechanics (IUTAM). The presentation will recount this story, with emphasis on the connection between scientific questions and social and cultural issues, in a period marked by two world wars and great strengthening of international relationships.