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MODELING AND EXPERIMENTING[1]

Isabelle Peschard

San Francisco State University

Abstract:

Experimental activity is traditionally identified with testing the empirical implications or numerical simulations of models against data. In critical reaction to the 'tribunal view' on experiments, this essay will show the constructive contribution of experimental activity to the processes of modeling and simulating. Based on the analysis of a case in fluid mechanics, it will focus specifically on two aspects. The first is the controversial specification of the relevant parameters of a phenomenon. The second is conceptual innovation, with a redefinition of concepts central to the understanding of the phenomenon.

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