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CAB 273

Greatest Hits of the 60s and 70s: Progress in Fluid Mechanics in the last 5 Decades.

Much of the progress in applied mechanics and applied math has resulted from the gradual accumulation of knowledge and understanding through contributions by a community of researchers. However, occasionally a single paper contains fundamentally new knowledge and/or the foundation for a new approach. In this talk, I will discuss a few such papers dating from the time I entered academic life, and I will show the progress that resulted over the last 50 years. My examples start with the rise of scientific computing and, as time allows, include numerical solutions of PDEs, modeling of rheologically complex fluids, turbulent drag reduction, dispersed multiphase flows, interfacial flows, suspension mechanics, and chaotic dynamics.