Attitudes Towards Fluids: the Impact of Flow Visualization

JEAN HERTZBERG, University of Colorado, Boulder — Since 2003, a course on flow visualization has been offered to mixed teams of engineering and fine arts photography students at the University of Colorado. A survey instrument has been developed that explores student perceptions of and attitude towards fluid physics. It has been administered to students in the flow visualization course, in a traditional junior level fluid mechanics course, and in a course on design. Survey results indicate that the students in the flow visualization course, after a semester of making images for art’s sake, emerge believing that fluid mechanics is more important to themselves as engineers and to society than the students in the traditional course which is packed with real-life engineering examples. The use of photography in improving student perceptions is being extended to a course on perception of design; preliminary results from a survey on attitudes towards design will be presented. Examples of student images from both courses will be presented as well.

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