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Discover lagrangian equation for fluid mechanics

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Lagrangian equation is a useful tool in dynamics. Many equations are developed with the use of Lagrangian equation. But it is not used in fluid mechanics. Now based on the momentum equation in fluid mechanics, I derived the Lagrangian equation so I proved that it can be used also in fluid mechanics. Detailed derivation will be presented in the conference. To illustrate the use of the equation, some examples are given. Those examples given are especially in very familiar area, so people can immediately recognize that is working. Momentum equations for inviscid fluid in Cartesian, cylindrical and spherical coordinates are chosen for the illustration. Now the door is open, application of the equation can be very fruitful to scientists in fluid mechanics.

Biography

Shuh Jing Ying did his graduation from Provincial Shao-Hing High School. Because of the World War II, he liked to be in military service, so he entered Chinese Air Force Technology Institute, and graduated with rank of number 3 in the class of 50 students. He served for four years in the Engine Overhaul Factory in Taiwan China as a Lieutenant, and then he entered National Cheng-Kung University, majored in Mechanical Engineering. He completed his MSc at Brown University and PhD at Harvard University in 1966. He received Outstanding Faculty Award in 1975, Engineer of Year Award in 1985, elected as Fellow of American Society of Mechanical Engineers in 1995, and published a text book '*Advanced Dynamics*' in 1997. He was retired in the year of 2000 and earned a title of Emeritus Professor. Currently, he is working with a part time job in the University of South Florida.

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