

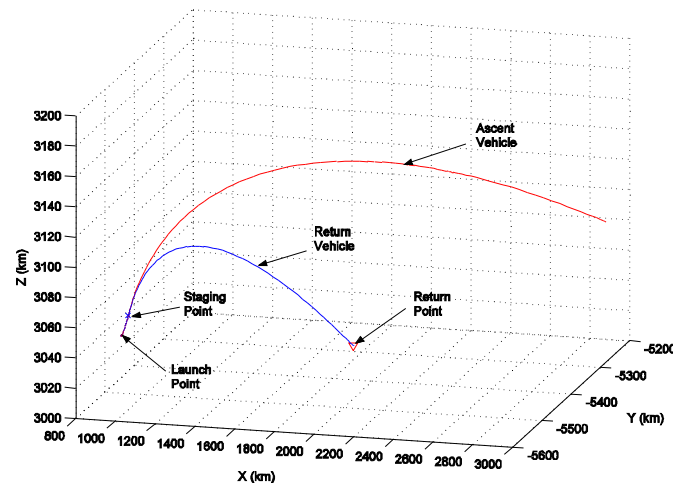


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## *“Lunch and Learn”*



The AIAA Houston Section Astrodynamics Technical Committee and co-sponsor Guidance, Navigation & Control Technical Committee present

# Trajectory Optimization from Euler to Lawden to Today

Christopher D'Souza

The Charles Stark Draper Laboratory  
Houston, Texas

**Date:** September 17, 2004 (Friday)

**Time:** Noon - 1:00 pm

**Place:** JSC Building 16, Conference Room 113

Trajectory optimization has a rich history that is oftentimes unappreciated. In the midst of solving current complex trajectory optimization problems it is important to keep in mind the significant contributions made by many who have gone before us, some of whom did not have the benefit of (modern) digital computers. This seminar will give an overview of the history of trajectory optimization to the present as well as discuss the current state of the art in optimization theory and techniques which are available. Applications to launch trajectories and orbit transfer problems will be presented.

Chris D'Souza has been involved in spacecraft trajectory optimization, guidance and navigation for over 20 years. He performed mission design and navigation analysis for the Magellan and Galileo missions. He has been involved in autonomous rendezvous and docking navigation and mission design and analysis for the past 8 years. His research interests include real-time trajectory optimization for multi-agent hybrid systems applied to missiles and spacecraft.

Please bring your lunch and a friend. This free event is open to the public. AIAA membership is not required. If you plan to attend, registration is recommended and is easy to do online at our new website, [www.aiaa-houston.org](http://www.aiaa-houston.org). If you require JSC badging, please register 3 days in advance (citizens) or 2.5 - 3 weeks in advance (non-citizens). For additional information, contact Douglas Yazell at 281-244-3925 or [douglas.yazell@honeywell.com](mailto:douglas.yazell@honeywell.com).

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