

Visitor Research Report

Visitor Name: Professor Eli Turkel
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Area of Research: Numerical Algorithms for Navier-Stokes Equations,
Steady and Unsteady Flows

Period of Visit: September 8, 2009 – September 10, 2009

Goal:
Improve the efficiency of time dependent codes

Strategy:
Use the recently developed implicit residual smoothing for dual time steps with applications to time dependent problems

Accomplishments:
Within 3 days we worked out the strategy needed to implement the implicit residual smoothing within TLNS3D

Future Work:
Actually coding of the new algorithm and testing on flow around a NACA0012 at high angle of attack

Longer range goal is to implement this within FUN3D

Pending Publications:
not yet

Seminar Presented:
none