March 15–19, 2009
Daniel Hotel
Herzlia

IAAC the Israeli Association for Automatic Control Course on
missile guidance

Day 1
‣ Numerical Techniques
‣ Fundamentals of Tactical Missile Guidance
‣ Method of Adjoints and the Homing Loop
‣ Noise Analysis
‣ Proportional Navigation and Miss Distance

Day 2
‣ Digital Noise Filters in the Homing Loop
‣ Advanced Guidance Laws
‣ Kalman Filters and the Homing Loop
‣ Endoatmospheric Ballistic Targets
‣ Extended Kalman Filtering
‣ Other Forms of Tactical Guidance and Tactical Zones
‣ Strategic Considerations

Day 3
‣ Boosters
‣ Lambert Guidance
‣ Strategic Intercepts
‣ Miscellaneous Topics
‣ Radome Slope Estimation
‣ Predictor Corrector Guidance

Day 4
‣ Multiple Target Problem
‣ Intercept Point Prediction Error for Ballistic Targets
‣ Boost Phase Estimation
‣ Theater Missile Defense and Guidance
‣ Filtering Options For Tracking Exoatmospheric Targets
‣ Airframe Linearization

Day 5
‣ Introduction to Flight Control System Design
‣ The Three Loop Autopilot
‣ Weaving Targets and Proportional Navigation
‣ Optimal Guidance Against Weaving Targets
‣ Filtering and Guidance For Weaving Targets
‣ Feedback Linearization
‣ A Filtering Approach For Getting Small Miss Distances
‣ Comparison of Statistical Digital Simulation Methods

Extra
‣ Flight Control Compensation
‣ The Most Unusual Guidance Method
‣ Other Methods For Guidance Law Development

For registration and further details call 04-8294780 or see the website http://iaac.technion.ac.il/events.html