

GRADUATE STUDENTS IN CONTROL – GSC'02

MARCH 24, 2002, ROOM 641, FACULTY OF MECHANICAL ENG., TECHNION — IIT

WELCOME AND ANNOUNCEMENTS (8⁴⁵ – 8⁵⁰)

TUTORIAL LECTURE

8⁵⁰ *A Frisian View on Behaviors*

Gjerrit Meinsma, Faculty of Applied Mathematics, University of Twente, The Netherlands

TEA BREAK (9⁴⁰ – 9⁵⁰)

SESSION 1 (APPLICATIONS)

9⁵⁰ *Oscillatory Neural Networks for Robotics Yoyo Control*

Hui-Liang Jin, ME, Technion, Supervisor(s): M. Zacksenhouse

10¹⁵ *DTC Tuning of MIMO Processes with Multiple Time Delays*

Uri Burstein, ME, Technion, Supervisor(s): Z. J. Palmor

10⁴⁰ *Identification-Based Power Station Models for Purposes of Robust Control Design*

Leonid Gruzman, EE, Technion, Supervisor(s): E. Zeheb

11⁰⁵ *Blind Source Separation of Bearing Vibrations*

Ran Peled, ME, Technion, Supervisor(s): M. Zacksenhouse

TEA BREAK (11³⁰ – 11⁴⁰)

SESSION 2 (THEORY)

11⁴⁰ *A Novel Quaternion Kalman Filter*

Daniel Choukroun, AE, Technion, Supervisor(s): I. Y. Bar-Itzhack & Y. Oshman

12⁰⁵ *Probability-Guaranteed Robust H^∞ Performance Analysis*

Shmuel Boyarski, EE-S, Tel-Aviv University, Supervisor(s): U. Shaked

12³⁰ *Order Reduction of Uncertain Transfer Functions on the Unit Circle*

Yuri Dolgin, EE, Technion, Supervisor(s): E. Zeheb

12⁵⁵ *Lyapunov Transformation in Periodic Linear Systems*

Andrey Melnikov, ECE, Ben-Gurion University of the Negev, Supervisor(s): I. Lewkowicz

13²⁰ *Stochastic H^∞ Output-Feedback Tracking with Preview*

Eli Gershon, EE-S, Tel-Aviv University, Supervisor(s): U. Shaked

LUNCH (13⁴⁵ – 14⁵⁵)

SESSION 3 (VEHICLE CONTROL & NAVIGATION)

14⁵⁵ *Algorithms for Rollover Avoidance Control of a Wheeled Vehicle*

Nahum Medlinger, AgrE, Technion, Supervisor(s): P.-O. Gutman

15²⁰ *Controller Design for Trajectory Tracking of Autonomous Vehicles*

Shai Arogeti, ME, Ben-Gurion University of the Negev, Supervisor(s): N. Berman

15⁴⁵ *Navigation and Guidance of a Human-Tracking Vehicle*

Amit Serebrennikov, EE, Technion, Supervisor(s): N. Shimkin & P.-O. Gutman

TEA BREAK (16¹⁰ – 16²⁰)

SESSION 4 (AEROSPACE APPLICATIONS)

16²⁰ *Controllers for Spacecraft Systems with Momentum Wheels and Gas Jet Actuators*

Boris Grinberg, ME, Ben-Gurion University of the Negev, Supervisor(s): A. Ailon & R. Segev

16⁴⁵ *Boost Phase Identification of Theater Ballistic Missiles Using Radar Measurements*

Meirav Almogi-Nadler, AE, Technion, Supervisor(s): J. Z. Ben-Asher & Y. Oshman

17¹⁰ *A Derivation of Guidance Law for Formation Flight of Atmospheric UAV*

Shai Segal, AE, Technion, Supervisor(s): J. Z. Ben-Asher & H. Weiss