

5th Elgersburg School

Mathematical Systems Theory

February 18-22, 2013



KLAUS TSCHIRA STIFTUNG
GEMEINNÜTZIGE GMBH

Control in Power Electronics

George Weiss

Infinite-Dimensional Systems

Hans Zwart

George Weiss is professor of Systems and Control Engineering at the School of Electrical Engg., Tel Aviv Univ., Israel www.eng.tau.ac.il/~gweiss/.

Professor Weiss has worked on infinite dimensional linear systems theory, mainly from the operator semigroup point of view, and three of his papers in this field have over 200 citations. He is a coauthor (with Marius Tucsnak) of the monograph "Observation and Control for Operator Semigroups" (Birkhäuser, 2009). In parallel, he has been active in control theory (in particular, internal model based control) applied to power electronics. He is currently involved in building prototypes for two patents that he holds in this area, that concern the grid integration of distributed power generators.

Hans Zwart is professor of Systems Theory at the Dept. of Applied Maths, Univ. of Twente, The Netherlands, wwwhome.math.utwente.nl/~zwarthj/.

Professor Zwart has coauthored (with Ruth Curtain) the seminal book "An Introduction to Infinite-Dimensional Linear Systems Theory" (Springer, 1995), which has had a huge impact in systems theory, and the recent monograph (with Birgit Jacob) "Linear Port-Hamiltonian Systems on Infinite-Dimensional Spaces" (Birkhäuser, 2012). He investigates linear systems on Hilbert spaces using advanced techniques from Functional Analysis.

Both **George Weiss** and **Hans Zwart** are distinguished researchers in their field with a huge impact and they are excellent lecturers.

Programme each day

Lecture 90 mins
Power Electronics G. Weiss

Lecture 90 mins
 ∞ dim Systems H Zwart

Lunch

Work on ex. sheet 60 mins
Power Electronics

example class 60 mins
Power Electronics

Work on ex. sheet 60 mins
 ∞ dim Systems

example class 60 mins
 ∞ dim Systems

Dinner

Limited number of grants funded by Klaus Tschira Stiftung

Applications: www.tu-ilmenau.de/math/forschung/tagungen/elgersburg-schools/registration/

Deadline for applications: November 31, 2012

Organizers: Achim Ilchmann (TU Ilmenau), Timo Reis (U Hamburg), Fabian Wirth (U Würzburg)