Third Russian–Swedish Control Conference

May 11–13, 1998,
Royal Institute of Technology (KTH), Stockholm, Sweden.

Program

The Russian–Swedish Control Conference is a small workshop organized every third year with the purpose of stimulating contacts between researchers active in the areas of systems and control in Russia and Sweden. Previous meetings have been held in Linköping (1992) and St.Petersburg (1995). The present meeting is co-chaired, on the Swedish side, by Anders Lindquist (KTH) and Lennart Ljung (Linköping), and on the Russian side, by Alexander L. Fradkov (St. Petersburg).

The scope of the conference includes all the aspects of systems and control ranging from fundamental research to engineering applications.

Venue

The workshop sessions will all be held at KTH, in 'Kollegiesalen A' in the Administration Building, Valhallavägen 79.

Hotel rooms have been reserved in Hotel Arcadia, Körsbärsvägen 1, Stockholm, Tel +46 8 160195. Lunches and dinners will be provided in nearby restaurants except for the dinner on Tuesday.

Social program

A reception in the form of a dinner buffet will be held on Sunday May 10 starting at 18:00 at the KTH in Room 3423, Lindstedtsvägen 15.

A sightseeing trip is planned for Tuesday afternoon, May 12, and a dinner somewhere in town for the evening.

Walking directions

It is a five-minute walk from Hotel Arcadia to the KTH. Walk eastward one long block along Valhallavägen. You will then be at the entrance of the KTH campus. The first building you will see at Valhallavägen is the administration building, where the sessions will be held. To reach the reception on Sunday evening enter the arch way to the court yard of the large main building. The division of Optimization and Systems Theory is located in the clock tower. To the right below the tower is the entrance to the reception (Lindstedtsvägen 15).

Contact points

For matters concerning the registration contact Leena Druck, Tel. +46 8 790 8112, fax +46 8 225320, email druck@math.kth.se .

Schedule

Sunday May 10

18:00 - 22:00	Registration and reception at KTH, Room 3423, Lindstedtsvägen 15.

Monday May 11

	A. Lindquist (Chair)
09:00 - 09:05	Opening A. Lindquist (Sweden)
09:05 - 09:35	V. A. Yakubovich (Russia): *Quadratic criterion of absolute stability*
09:35 - 10:05	K. J. Åstrom (Sweden): *Singularities in a system with switching*
10:05 - 10:35	F. L. Chernousko (Russia): *Ellipsoidal bounds on attainable sets*
10:35 - 11:00	Coffee Break
	T. Glad (Chair)
11:00 - 11:30	A. B. Kurzhanskii (Russia): *The optimality principle under incomplete information*
11:30 - 12:00	T. Söderström (Sweden): *Some approaches on how to use the delta operator when identifying continuous-time processes*
12:00 - 12:30	A. A. Pervozvanskii (Russia): *Stability of nonlinear systems with quasilogic control*
12:30 - 14:00	Lunch
	A. B. Kurzhanskii (Chair)
14:00 - 14:30	A. L. Fradkov (Russia): *What can be done by a small control ?*
14:30 - 15:00	T. Glad (Sweden): *Moving between the equilibria of a nonlinear system*
15:00 - 15:30	A. S. Matveev (Russia): *Towards a qualitative theory of hybrid dynamical systems*
15:30 - 16:00	Coffee Break
	F. L. Chernousko (Chair)
16:00 - 16:30	G. A. Leonov (Russia): *Stability and oscillations of pendulum-like feedback systems*
16:30 - 17:00	B. Bernhardsson (Sweden): *Some real-time control problems*
17:00 - 17:30	S. V. Gusev (Russia): *Sampled-data control of uncertain mechanical systems*
19:30	Dinner

Tuesday May 12

	T. Söderström (Chair)
09:00 - 09:30	B. T. Polyak (Russia): H^∞ *optimization via low-order controllers*
09:30 - 10:00	A. Isaksson (Sweden): *Identifiability of processes subject to missing data*
10:00 - 10.30	A. Pogromskii (Russia): *On destabilization of dynamical systems via diffusive coupling*
10:30 - 11:00	Coffee Break
	B. T. Polyak (Chair)
11:00 - 11:30	A. Lindquist (Sweden): *Covariance extension and speech processing*
11:30 - 12:00	N. Barabanov (Russia): *On the static* H^∞ *control problem*
12:00 - 12:30	A. Rantzer (Sweden): *Harmonic oscillations in nonlinear and uncertain systems*
12:30 - 13:30	Lunch
13:30 - 23:00	Outing with dinner

Wednesday May 13

	A. L. Fradkov (Chair)
09:00 - 09:30	L. Ljung (Sweden): *Closed-loop identification revisited*
09:30 - 10:00	A. V. Kryazhimskii (Russia): *Constraint aggregation technique for convex optimal control problems with state constraints*
10:00 - 10:30	A. Medvedev (Sweden): *On robust stability of two flux observers for induction machines*
10:30 - 11:00	Coffee Break
	A. A. Pervozvanskii (Chair)
11:00 - 11:30	V. N. Bukov (Russia): *The algebraic theory of systems: An enclosure's method*
11:30 - 12:00	H. Hjalmarsson (Sweden): *Iterative feedback tuning*
12:00 - 12:30	D. Rockityanskii (Russia): *State estimation in linear systems with perturbed matrices*
12:30 - 14:00	Lunch
	L. Ljung (Chair)
14:00 - 14:30	A. S. Shiriaev (Russia): *Detectability of invariant set of nonlinear system with stable dynamics*
14:30 - 15:00	K. Nordström (Sweden): *On the multi-input pole placement control problem*
15:00 - 15:30	G. Kronin (Russia): *Optimal regulators for the control problem with non-quadratic quality functional*
15:30 - 16:00	N. N. Krasovskii and N. Yu. Lukoyanov (Russia): *Functional interpretation and reduction in problems of feedback control*