## Industrial Workshop on Complex Analysis and Convex Optimization for EM Design: Theory and Applications

## Stockholm University September 1-2, 2016

## Workshop Programme

Stockholm University, Department of mathematics, Kräftriket, House 5, Room 22.

	Thursday, September 1	
12:00	All interested	Lunch at Kräftan
13.00		Welcome
13.15	Mats Gustafsson, LU	tba
13.40	Jonas Friden, Ericsson	Interference rejection and transmit power control in microwave backhaul for small cell deployment
14.05	Hans Edin, KTH	Utilisation of the Hilbert transform in extracting the propagation constant and the complex permittivity of electrical insulation in high voltage equipment
14.30	Sven Nordebo, LNU	Passive approximation and optimization: An example of optimal absorption in gold nanoparticle suspensions
14.55		Coffee and Poster
15.40	Annemarie Luger, SU	On Herglotz-Nevanlinna functions in several variables
16.05	Christer Larsson, SAAB	RCS Analysis Applications
16.30	Dierk Bormann, ABB	Dynamical order reduction for electromagnetic models
17.05	Daniel Sjöberg, LU	Convex optimization for endfire array antennas
18:00	All interested	Dinner at Haga Forum
	Friday, September 2	
8.30	Ying Zhinong, Sony Mobile	Some complex EM challenges in 5G applications
9.00	Lars Jonsson, KTH	On properties of multi-dimensional systems
9.25	Patrik Persson, Ericson	5G and its challenges and opportunities
9.50	Anders Höök, SAAB	tba
10.15		Coffee and Poster
11.00	Henrik Holter, SAAB	Antennas for electronic warfare
11.25	Niklas Wellander, FOI	Quantification of uncertainties related to EM wave propagation in stochastic environment
11.50	All	Discussion and Summary
12.10		End of workshop
12:20	All interested	Lunch at Kräftan

- This workshop is organized in cooperation between Lund University, Linnæus University, Royal Institute of Technology and Stockholm University within the SSF-project: *Complex analysis and convex optimization for EM design*
- The aim is to inform about the objectives and outcomes of the SSF-project, and also to learn about the needs of applied mathematics in industry.
- Presentations will be held by researchers from academia and the industry.
- There is no fee for the workshop. All costs for lodging and meals are paid by the individual participants.
- Send a mail to sven.nordebo@lnu.se if you will participate in the workshop before August 16. Please indicate if you will participate in the dinner on September 1.

## Participants

Name	Affiliation
Dierk Bormann	ABB
Mariana Dalarsson	LNU
Hans Edin	КТН
Casimir Ehrenborg	LU
Anders Ellgardt	Datapath
Henrik Frid	КТН
Jonas Friden	Ericsson
Mats Gustafsson	LU
Henrik Holter	SAAB
Anders Höök	SAAB
Yevhen Ivanenko	LNU
Lars Jonsson	КТН
Davood Khodadad	LNU
Christer Larsson	SAAB
Annemarie Luger	SU
Johan Malmström	КТН
Torleif Martin	SAAB
Sven Nordebo	LNU
Andrei Osipov	КТН
Patrik Persson	Ericsson
Daniel Sjöberg	LU
Niklas Wellander	FOI
Ying Zhinong	Sony Mobile