

The 18th SEFI Mathematics Working Group Seminar

27th - 29th June, Gothenburg, Sweden

Programme

Location: Mathematical Sciences, Chalmers

Sunday 26/6/2016

Time	Location	Event	
18.00 – 20.30	Mathematical Sciences Lobby	Registration and mingle	Afterwards there will be informal pub visits

Monday 27/6/2016

Time	Location	Event	Speaker
8:00 – 9:00	GD -Foyer	Registration (tea/coffee)	
9:00 – 9:30	GD	Welcome Addresses: Local organizers Nikola Markovic, Dean of education, Chalmers Daniela Velichova, Chair of SEFI Mathematics Working Group	
9.30 – 10.30	GD	Keynote Lecture 1 (chair Tommy Gustafsson) Competency based curricula in mathematics	Mogens Niss
10:30 – 11:00	LaPlace	Tea/Coffee	
		Paper Presentations: Mathematical competencies (chair Daniela Velichova)	
11:00 – 11:20	GD	Teaching modelling and problem solving with a set of realistic problems	Dag Wedelin
11:20 – 11:40	GD	Case study: Acquisition of mathematical industrial engineering competences during the first year	Araceli Queiruga-Dios
11:40 – 12:00	GD	Turning a standard statics task into a mathematical modelling opportunity: The case of the “tumbler task”	Burkhard Alpers
12:00 – 12:50		Group Discussions on Mathematical competencies	
	MVF31	Group 1, Group leader: Colin Steele	
	MVF32	Group 2, Group leader: Michael Peters	
	MVFxx	Group 3, Group leader: Frode Rønning	
	MVF33	Group 4, Group leader: Stephanie Treffert-Thomas	
12:50 – 14:00	OOTO	Lunch	
14:00 – 14:20	GD	Plenary Discussion on Mathematical competencies (chair Burkhard Alpers)	
14.20 – 15.00	MVF	Poster presentations at the exhibition area	
		Blended Learning; a specific example	Vilhelm Adolfsson
		Using simple tests to identify students needing support in engineering mathematics	Donald John Ballance
		The Hamburg MintFit math test	Helena Barbas
		Project assignments within math/geometry courses	Jelena Beban Brkic
		Design and implement interactive modules of learning mathematics for engineering students	Cristina Caridade
		Preparing students in second level education system for Engineering Mathematics	Michael Carr
		Assessment of asylum seekers’ and immigrants’ mathematical competence	Kari Lehtonen
		An exploratory approach to engineering mathematics using GeoGebra	Eva Mossberg

14.20 – 15.00	MVF	Poster presentations at the exhibition area	
		The selection factors of deep versus superficial mathematics learning strategy	Bronė Narkevičienė
		An investigation to determine if first year engineering undergraduate students suffer from mathematics anxiety	Mike Peters
		Malware propagation models: A challenge for engineering students	Araceli Queiruga-Dios
		The Spanish identity card and real life applications as a realistic way to learn mathematics and software development	Araceli Queiruga-Dios
		Flipped classroom in interdisciplinary course	Wigand Rathmann
		Enhancing the ability to identify and use mathematical concepts	Daniela Richtarikova
		Model of passing mathematics course at the university	Aurelija Sakalauskaitė
		MECD : The Manchester Engineering Campus Development : with an angle for Mathematics	Colin Duncan Constable Steele
		Using online-assessment to improve learner-centered teaching	Kathrin Thiele
		TeStED – Transitioning without A2 level mathematics	Stephanie Treffert-Thomas
		Parallel Paper Presentations: Technology-webb (chair Carol Robinson)	
15:00 – 15:20	GD	Embedding mathematics content within the electronics courses for engineering students	Morten Brekke
15:20 – 15:40	GD	Future mathematics – using technologies to improve mathematics teaching and learning in engineering studies	Kirsi-Maria Rinneheimo
15:40 – 16:00	GD	The development and evaluation of on-line mathematical resources for the teaching and learning of calculus, and their relation to students' learning preferences	Gordon Hunter
		Parallel Paper Presentations: Modelling-project (chair Paul Robinson)	
15:00 – 15:20	Euler	Evaluating a course in mathematical modelling and problem solving from students' perspective	Tabassum Farzana Jahan
15:20 – 15:40	Euler	Mathematics lecturers' views on mathematical modelling: a quest for understanding the gap between research and practice	Stephanie Treffert-Thomas
15:40 – 16:00	Euler	A project based learning approach to teaching second order differential equations to engineers	Michael Carr
16:00 – 16:30	LaPlace	Tea/Coffee	
16:30 – 16:50	GD	Mathematics for carousels and roller coasters: Challenging project work for engineering students	Ann-Marie Pendrill (chair T Gustafsson)
18:00 – 20:00	Liseberg	Continuation "in practice" at the amusement park Liseberg (mathematical-social event)	Ann-Marie Pendrill
20:00 -	Trebello	Dinner at own cost	

Tuesday 28/6/2016

Time	Location	Event	Speaker
9.00 – 10.00	GD	Keynote Lecture 2 (chair Burkhard Alpers)	
		Teaching mathematics to students who are not primarily interested in mathematics	Tom Lindström
		Parallel Paper Presentations: Motivation of students (chair Burkhard Alpers)	
10:10 – 10:30	GD	Applied problems and use of technology in basic courses in probability and statistics – a way to enhance understanding and achieve a more positive attitude	Lena Zetterqvist
10:30 – 10:50	GD	Adaptive teaching of mathematics for engineering students	Iveta Jancigova
		Parallel Paper Presentations: Support measures (chair Marie Demlova)	
10:10 – 10:30	Euler	Do you really know what resources your students use to learn mathematics	Carol Robinson
10:30 – 10:50	Euler	Is it feasible to replace teachers by e-learning in introductory mathematics?	Karsten Schmidt
10:50 – 11:20	LaPlace	Tea/Coffee	
		Parallel Paper Presentations: Activation of students (chair Stefan Lemurell)	
11:20 – 11:40	GD	Improved engagement and learning in flipped classroom calculus	Lars Filipsson, Mikael Cronhjort
11:40 – 12:00	GD	Learning mathematics through classroom interaction	Hans Georg Schaathun
12:00 – 12:20	GD	Lesson Moodle for a self-directed learning of mathematics	Deolinda Rasteiro
12:20 – 12:40	GD	A blended learning scenario for mathematical preparation courses – video based learning and matching in-class lectures	Karin Landenfeld
		Parallel Paper Presentations: Transition (chair Jana Madjarova)	
11:20 – 11:40	Euler	On transition from high school to university	Marie Demlova
11:40 – 12:00	Euler	Models of re-engaging adult learners with mathematics	Ciaran O’Sullivan
12:00 – 12:20	Euler	Competent without competencies? Change of mathematics education at secondary school – the influence on the university entrance level	Angela Schwenk
12:20 – 12:40	Euler	Innovation in mathematics education – a synthesis of the debate	Olle Hellblom
12:40 – 13:50	OOTO	Lunch	
		Parallel Paper Presentations: Technology (chair Tommy Gustafsson)	
13:50 – 14:10	GD	Using Maple as a tool when studying calculus	Gerd Brandell
14:10 – 14:30	GD	The future of online mathematics teaching and assessment	Jonathan Watkins
		Parallel Paper Presentations: Activation of students (chair Laura Fainsilber)	
13:50 – 14:10	Euler	UniDoodle: A multi-platform smart device student response system – evaluated in an engineering mathematics classroom	Seamus McLoone
14:10 – 14:30	Euler	A calculus course in knowledge feedback format	Håkan Lennerstad
14.40		Bus/Tram to the harbour (Rosenlundspiren). Tram stop Järntorget	
15:30 – 19:30		Excursion to Gothenburg archipelago with the steamer Bohuslän	
19:30	Pir 11	Conference dinner at Restaurant Pir 11, address Lindholmsspiren 11	

Wednesday 29/6/2016

Time	Location	Event	Speaker
9.00 – 10.00	GD	Keynote Lecture 3 (chair Marie Demlova)	
		Making the Right Choice	Jana Madjarova
10:00 – 11:00		Tea/Coffee and Group Discussions on SEFI MWG Seminars – mission and future	
	MVF31	Group 1, Group leader: Michael Peters	
	MVF32	Group 2, Group leader: Cristina Caridade	
	MVFxx	Group 3, Group leader: Angela Schwenk	
	MVF33	Group 4, Group leader: Norbert Kalus	
11:00 – 11:25	GD	Plenary Discussion on SEFI MWG Seminars (chair Daniela Velichova)	
		Parallel Paper Presentations: Technology – Assessment (chair Ciaran O’Sullivan)	
11:30 – 11:50	GD	Computer aided assessment in mathematics courses for engineers	Frode Rønning
11:50 – 12:10	GD	Using electronic exams to provide engineering mathematics students with rapid feedback	Karen Henderson
12:10 – 12:30	GD	Computer-aided assessment (CAA): An effective way of teaching, assessing and supporting engineering students at Brunel university	Inna Namestnikova
		Parallel Paper Presentations: Special topics (chair Michael Carr)	
11:30 – 11:50	Euler	Explorative computer-assisted learning of partial differential equations in a mixed group of students from mathematics and engineering – example of classroom practices	Norbert Kalus
11:50 – 12:10	Euler	Can artificial intelligence help engineering students develop their intelligence?	Larissa Fradkin
12:10 – 12:30	Euler	-----	
12.30 – 12.40	GD	19th SEFI MWG seminar in 2018 Presentation	
12:40 – 12:50	GD	Closing	
12:50 – 14:00	OOTO	Lunch	