



College of Science, Engineering and Technology

# **Programme for** *Symposium on the Application of Finite Elements in Physics and Engineering*

**Date:** 11 - 14 October 2016

**Venue:** Unisa Science Campus  
Thamsanqa Kambule Auditorium

**Time:** 08h15 – 16h00

**RSVP:** Ms Thabiso Legong

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Tuesday, 11 October – Opening: Thamsanqa Kambule Auditorium

Time	Activity	Speaker	Title
08:15	Registration and Coffee		
08:45	Welcome	Director	
09:00	Talk	M Braun	Setting the Scene
09:30	Talk	W Bangerth	Introduction to the method of finite elements for novices Part I
10:30	Coffee Break		
11:00	Talk		Introduction Part II
12:00	Lunch		
13:00	Talk	D Kolb	Using FEM in molecular physics
14:00	Talk	L Drescher & K Schmidt	Mortar FEM Calculations for molecules using DFT
15:00	Coffee		

Wednesday, 12 October – 5th Floor, GJ Gerwel Building

Time	Activity	Speaker	Title
08:30	Coffee		
09:00	Talk	L Korous	The finite element library Hermes2D
10:00	Talk	W Bangerth	The finite element library deal.II
11:00	Coffee Break		
11:30	Talk	SW Funke	The finite element environment FEniCS
12:30	Lunch		
13:30	Talk	C Geuzaine	GMSH, a free and powerful mesh generator
14:30	Talk	M Braun	Molecular Multi Domain Muffin Tin
			Finite element Calculations
15:30	Coffee		
18:00 - 19:30	Cocktail Function		

Thursday, 13 October – 5th Floor, GJ Gerwel Building

Time	Activity	Speaker	Title
08:30	Coffee		
09:00	Talk	K Schmidt	The finite element library concepts
10:00	Talk	SW Funke	Dolfin-adjoint + FEniCS = Efficient Optimization
11:00	Coffee Break		
11:30	Talk	P Karban	Agros2D: FEM for Electrical Engineering
12:30	Lunch		
13:30	Talk	P Lukas	Python + FEniCS
14:30	Tutorial	P Lukas	Hands on with FEniCS
16:00	Coffee		

Friday, 14 October – 5th Floor, GJ Gerwel Building

Time	Activity	Speaker	Title
08:30	Coffee		
09:00	Tutorial	W Bangerth	Hands on with deal.II
10:30	Coffee Break		
11:00	Tutorial	L Korous	Hands on with Hermes2D
12:30	Lunch		
13:30	Tutorial	K Schmidt	Hands on with concepts
14:30	Symposium Closing and Information about Proceedings	M Braun	
15:00	Coffee		