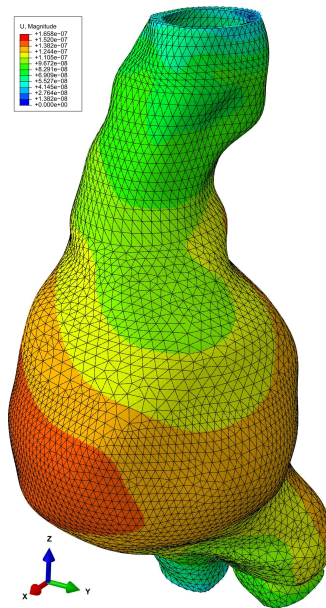


EPSRC WORKSHOP PROGRAMME

Elastic deformation and dynamic response of aneurysm repairs: modelling and applications

UNIVERSITY OF LIVERPOOL – FEBRUARY 2-3, 2017

Liverpool Centre for Mathematics in Healthcare



EPSRC

Engineering and Physical Sciences
Research Council



UNIVERSITY OF
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The registration and all presentations will be held in The Chapel of the Foresight Centre

Thursday 2 February 2017

09.00-10.00	Registration, coffee	
10.00-10.20	K. Langfeld (Head of Department, Mathematical Sciences, University of Liverpool)	Welcome
10.20-11.00	F. Torella (Royal Liverpool University Hospital)	Introduction to AAA, EVAR and EVAS
11.00-11.40	J.-P. de Vries (St. Antonius Hospital Nieuwegein, The Netherlands)	Displacement of fluid out the aortic intraluminal thrombus; results of a pilot study and consequences for EVAS
11.40-12.00	Coffee	
12.00-12.40	R. Fisher (Royal Liverpool University Hospital)	Modes and mechanisms of failure of EVAR/EVAS
12.40-13.20	P. Costandi (Endologix, USA)	Pressure propagation, investigations of the mechanics of migration and the development of predictive models
13.20-14.20	Lunch	
14.20-15.00	R. McWilliams (Royal Liverpool University Hospital)	Methods of imaging surveillance after EVAS/EVAR
15.20-16.00	L. Argani (University of Liverpool)	Modelling of deformation and dynamic response of abdominal aneurysm sealing
16.00-16.40	T. Papathanasiou (Brunel University London)	Modelling of wave reflection in multi-stented blood vessels
16.40	Coffee and Discussion	
18.00	Workshop Dinner at The Old Blind School Dining Rooms	

Friday 3 February 2017

09.00-09.20	Coffee	
09.20-10.00	J.-P. de Vries (St. Antonius Hospital Nieuwegein, The Netherlands)	New software to better determine endograft apposition in the aortic neck post-EVAR; how to early detect endograft positional changes
10.00-10.40	M. Wall (Russell Hall Hospital)	Aneurysm rupture - theoretical and practical challenges
10.40-11.00	R. Schuurmann (St. Antonius Hospital Nieuwegein, The Netherlands)	Evaluation of the curvature of the aortic trajectory in a study of the seal failure in the aortic neck
11.00-11.20	A. Movchan (University of Liverpool)	Modelling of waves in stented blood-vessels
11.20-11.40	Coffee and Discussion	
11.40-12.20	D. Bigoni (University of Trento, Italy)	Mechanical properties of non-linear biological materials: theoretical and experimental study
12.20-13.00	Y. Fu (Keele University)	Modelling of aneurysm initiation as a bifurcation phenomenon
13.00-14.00	Lunch	
14.00-14.40	J. Spencer (University of Liverpool)	Mathematical imaging and its medical applications
14.40-15.20	G. Mishuris (Aberystwyth University)	Modelling of Solid-Fluid interaction in biological ruptures
15.20-15.30	A. Movchan (University of Liverpool)	Closing
15.30	Coffee and Discussion	