

THURSDAY, 6 APRIL, 2017

09:00	Registration, tea and coffee, outside the O’Flaherty Theatre, Main Concourse, NUI Galway
09:50	Opening of the workshop by Rachel Quinlan, Head of the School of Mathematics, Statistics and Applied Mathematics (in AC201)

Session chair: *Natalia Kopteva*

10:00	Christos Xenophontos	On the finite element approximation of fourth order singularly perturbed eigenvalue problems
10:25	Torsten Linß	Collocation for singularly perturbed boundary-value problems
10:50	Stephen Russell	A two-scale sparse grid method for a singularly perturbed reaction-diffusion problem in three dimensions

11:15 Tea and coffee break

Session chair: *Martin Stynes*

11:55	Simon Becher	Uniform error estimates for general linear turning point problems on layer-adapted meshes
12:20	Sebastian Franz	Exponentially graded meshes and singularly perturbed problems

12:45 Lunch in *An Bhialann*

Session chair: *Maria Pickett*

14:15	John J. H. Miller	Tutorial on using MATLAB to solve singularly perturbed systems of initial value problems
14:40	Eugene O’Riordan	Singularly perturbed convection-diffusion problems posed on an annulus
15:05	Alan F. Hegarty	Numerical solution of convection-diffusion problems on annular and related domains

15:30 Tea and coffee break

Session chair: *Christos Xenophontos*

16:10	Vladimir Volkov	Asymptotic-numerical method for the description of moving fronts in nonlinear two-dimensional reaction- diffusion models
16:35	Dmitry Lukyanenko	Solving ill-posed problems for nonlinear singularly perturbed equations with internal and boundary layers

17:00 Organisational issues

18:30 Conference dinner, Viña Mara, 19 Middle St., Galway

FRIDAY, 7 APRIL, 2017

	Session chair: <i>Sebastian Franz</i>	
10:00	Martin Stynes	Supercloseness of continuous interior penalty method for convection-diffusion problems with characteristic layers
10:25	Catherine Timoney	Singularly perturbed nonlinear time-dependent parabolic problem with singularly perturbed Neumann boundary conditions
10:50	Chad Westphal	Adaptively Weighted Finite Element Methods for PDE with Boundary Layers
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11:15	Tea and coffee break	
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	Session chair: <i>Alan Hegarty</i>	
11:55	Nikolay Nefedov	Initial boundary value problems for Burgers equation with nonlinear forcing: front motion and blow-up
12:20	Natalia Kopteva	Fully computable a posteriori error estimator using anisotropic flux equilibration on anisotropic meshes
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12:45+ ϵ	Closing of the workshop	

SATURDAY, 8 APRIL, 2017

There will be an excursion to the Burren and Cliffs of Moher, with stops including Dungauire Castle, Poul nabrone Dolmen and Blackhead. The bus depart at 9am from the Quadrangle of NUI Galway, and return at 3pm.