

**Advanced Numerical Methods for Hyperbolic Equations and Applications**  
**Prof. Michael Dumbser and Dr. Firas Dhaouadi**  
**Two special lectures given by Prof. Dr. Dr. hc. E.F. Toro, OBE**

**Week: 3 February - 7 February 2025**

Times	Monday 3/2	Tuesday 4/2	Wednesday 5/2	Thursday 6/2	Friday 7/2
09:00-11:00	Finite volume schemes for conservation laws I ( room 2A )	Finite volume schemes for conservation laws III ( room 2A )	ADER schemes ( room 2A )	Path-conservative finite volume schemes ( room 2A )	<i>Discontinuous Galerkin methods III</i> ( room 2A )
11:00-11:30	Cappuccino	Cappuccino	Cappuccino	Cappuccino	Cappuccino
11:30-13:00	Finite volume schemes for conservation laws II ( room 2A )	High order ENO/WENO finite volume methods ( room 2A )	Discontinuous Galerkin finite element methods ( room 2A )	Meshless particle methods (SPH) ( room 2A )	<i>Path-conservative FV schemes</i> ( room 2A )
13:00-14:00	Lunch	Lunch	Lunch	Lunch	Lunch
14:00-16:00	<i>FV schemes for conservation laws</i> ( room 2A )	<i>FV schemes on unstructured grids</i> ( room 2A )	<i>High order ENO/WENO Methods I</i> ( room 2A )	<i>Discontinuous Galerkin methods I</i> ( room 2A )	Advanced applications of ADER schemes ( room 2A )
16:00-16:30	Tea	Tea	Tea	Tea	Tea
16:30-18:00	<i>FV schemes for conservation laws</i> ( room 2A )	<i>FV schemes on unstructured grids</i> ( room 2A )	<i>High order ENO/WENO Methods II</i> ( room 2A )	<i>Discontinuous Galerkin methods II</i> ( room 2A )	The augmented Lagrangian approach for dissipative and dispersive systems ( room 2A )
18:15-19:15 Special lectures by Prof. E.F. Toro		<b>The HLLC Riemann solver</b> <b>(Prof. E.F. Toro)</b> ( room 2A )		<b>The Toro-Vázquez flux vector splitting</b> <b>(Prof. E.F. Toro)</b> ( room 2A )	
		theory session		laboratory session	