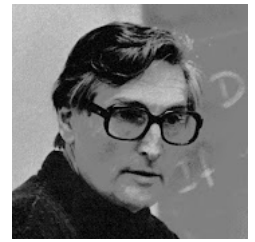


# Differential Algebra and Related Topics

## DART XII 2024, Universität Kassel



### Schedule of Presentations

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Tuesday, 09.04.24 (all talks in Lecture Hall – Room 1409)		
8:30 – 8:55	Registration	
8:55 – 9:00	Opening	
9:00 – 9:45	Gheorghe Craciun (Madison)	<i>Polynomial dynamical systems and reaction networks: persistence and global attractors</i>
9:45 – 10:30	Stefan Müller (Vienna)	<i>Positive equilibria of (generalized) mass-action systems</i>
<b>Coffee Break</b>		
11:00 – 11:45	Nathalie Verdière (Le Havre)	<i>Recent applications of functional equations in nonlinear dynamical systems</i>
11:45 – 12:30	Carsten Conradi (Berlin)	<i>Multistationarity regions for systems that admit a mono- mial parametrization</i>
<b>Lunch</b>		
14:00 – 14:45	Changbo Chen (Beijing)	<i>Geometrically analyzing the equilibria of parametric bio- chemical networks admitting linear conservation laws</i>
14:45 – 15:30	François Lemaire (Lille)	<i>Applications of integro-differential algebra</i>
<b>Coffee Break</b>		
16:00 – 16:45	Maria-Angeles Zurro (Madrid)	<i>A Galoisian approach to spectral problems for third- order ODOs</i>
<b>Poster Session</b>		
Wednesday, 10.04.24		
9:00 – 9:45	Thomas Dreyfus (Dijon)	<i>G function and hypergeometric series</i>
9:45 – 10:30	Jacques-Arthur Weil (Limoges)	<i>Computing the non-linear Galois groupoid for Painlevé equations with algebraic solutions</i>
<b>Coffee Break</b>		
11:00 – 11:45	Varadharaj R. Srinivasan (Mohali)	<i>Iterated and generalized iterated integrals</i>
11:45 – 12:30	Carlos Arreche (Dallas)	<i>Complex reflection groups as differential Galois groups</i>
<b>Social Program</b>		

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Thursday, 11.04.24

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9:00 – 9:45	Li Guo (New Jersey)	<i>Separable Volterra operators and generalized Reynolds algebras</i>
9:45 – 10:30	Wei Li (Beijing)	<i>Lüroth problem for partial differential fields</i>

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**Coffee Break**

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11:00 – 11:45	Rémi Jaoui (Lyon)	<i>On the problem of integration in finite terms and exponentially algebraic functions</i>
11:45 – 12:30	Alin Bostan (Paris)	<i>How to decide if a D-finite power series is algebraic?</i>

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**Lunch**

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14:00 – 14:45	Manuel Kauers (Linz)	<i>Separating variables in polynomial ideals</i>
14:45 – 15:30	Joris van der Hoeven (Paris)	<i>Computing with D-algebraic power series</i>

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**Coffee Break**

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16:00 – 16:45	Matthias Seiß (Kassel)	<i>Specializing normal forms for the classical groups in differential Galois theory</i>
16:45 – 17:30	André Platzer (Karlsruhe/Pittsburgh)	<i>Differential equation invariance axiomatization</i>

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Friday, 12.04.24

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9:00 – 9:45	Markus Lange-Hegermann (Lemgo)	<i>Probability distributions on linear PDE systems</i>
9:45 – 10:30	Mizuka Komatsu (Kobe)	<i>Application of differential elimination for physics-informed neural networks</i>

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**Coffee Break**

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11:00 – 11:45	Chenqi Mou (Beijing)	<i>Chordal graphs in ordinary differential triangular decomposition in top-down style</i>
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**Closing**

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