

Pre-School "Fundamentals of Diffusion and Spreading":

The conference is preceded by a pre-school on Sunday, August 23rd, introducing into basics of diffusion and spreading.

Sunday, August 23rd, 2015**Pre-School "Fundamentals of Diffusion and Spreading"**

Lectures, part 1: *Diffusion Step by Step*

12:30 – 14:30 **Armin Bunde** (University of Giessen, Germany),
Jörg Kärgner (University of Leipzig, Germany)

14:30 – 15:00 Coffee break

Lectures, part 2: *Diffusion Applications*

15:00 – 17:00 **Jürgen Caro** (University of Hanover, Germany),
Gero Vogl (University of Vienna, Austria)

Diffusion Fundamentals VI – Conference Program

The conference will take place at Dresden University of Technology, Chemistry Building (Bergstraße 66, 01069 Dresden, Germany). The lectures will be given in the **lecture theatre CHE S89** on the ground floor. Maps of the surrounding are shown in the programme booklet and on the [conference website](#).

Sunday, August 23rd, 2015**Welcome Party and Evening Lecture**

16:00 Opening of Registration

17:30 – 18:30 Welcome party with refreshments and finger food, part 1

Hans Joachim Meyer

(Minister for Higher Education, Research and Culture of Saxony (ret.), Germany)

18:30 – 19:15 Evening lecture: *A global Language or a World of Languages*

– introduced by **Hans Wiesmeth** (TU Dresden, Vice-President of SAW, Germany) –

19:15 – 20:30 Continuation of welcome party

Monday, August 24th, 2015

Morning Session

Chairs: **Grit Kalies** (Dresden), **Douglas M. Ruthven** (Orono)

09:00 – 09:15 **Hans Müller-Steinhagen** (Rector of TU Dresden, Germany)

Opening of Diffusion Fundamentals VI

– introduced by **Jörg Kärger** (University of Leipzig, Germany) –

09:15 – 09:55 **Rajamani Krishna** (University of Amsterdam, The Netherlands)

Uphill Diffusion

09:55 – 10:35 **Philipp Maass** (University of Osnabrück, Germany)

Diffusive Transport in Non-Equilibrium Steady States

10:35 – 11:05 Coffee break

Chairs: **Handan Tezel** (Ottawa), **Petrik Galvosas** (Wellington)

11:05 – 11:45 **William S. Price** (University of Western Sydney, Australia)

NMR Versatility

Tandem Lecture

11:45 – 12:55 **Klaus Kroy** (University of Leipzig, Germany): *Hot Brownian Motion: Theory*

Frank Cichos (University of Leipzig, Germany): *Hot Brownian Motion: Experiment*

12:55 – 14:30 Lunch break

(during lunch break: meeting book contributors, room 201)

Afternoon Session

Chairs: **Gero Vogl** (Vienna), **Fabian Jacobs** (Bautzen)

14:30 – 15:10 **Anne Kandler** (City University London, UK)

Analysing Language Shift: The Example of Scottish Gaelic

15:10 – 15:50 **Russel Gray** (Max Planck Institute for the Science of Human History, Jena, Germany)

Expansion of Language Families

15:50 – 16:20 Coffee break

Chairs: **Murray A. Moinester** (Tel Aviv), **Dieter Freude** (Leipzig)

16:20 – 17:00 **Joaquim Fort** (University of Girona, Spain)

The Neolithic Transition: Diffusion of People or Diffusion of Culture?

Tandem Lecture

17:00 – 18:10 **Detlef Gronenborn** (University of Mainz, Germany) and

Carsten Lemmen (Helmholtz Centre Geesthacht, Germany)

The Expansion of Farming as Seen from Archaeology and Related Disciplines

18:10 – 21:00 Poster session I with beer and finger food

(optional: continuation meeting book contributors, room 201)



Tuesday, August 25th, 2015

Morning Session

Chairs: **Alfred Leipertz** (Erlangen), **Armin Bunde** (Giessen)

09:00 – 09:40 **Dirk Brockmann** (Humboldt University Berlin, Germany)
Epidemics Spreading

09:40 – 10:20 **Shlomo Havlin** (Bar-Ilan University, Israel)
Spreading of Failures in the Internet and in Power Grids

10:20 – 10:50 Coffee break

Chairs: **Sabina Hrabetova** (New York), **Michael J. Saxton** (Davis)

10:50 – 11:30 **Hernán Makse** (City College of New York, USA)
A New Class of Superspreader: From Twitter, Cities and the Brain

11:30 – 12:10 **Charles Nicholson** (NYU Langone Medical Center, USA)
Brain Structure Revealed by Diffusive Spread of Molecules

12:10 – 14:30 Poster Session II with Lunch
(during lunch break: short meeting Diffusion Fundamentals Advisory Board, room 201)

Afternoon Session

Chairs: **Helmut Mehrer** (Münster), **Rustem Valiullin** (Leipzig)

14:30 – 15:10 **Michael Leitner** (Technical University Munich, Germany)
Dispersal in Plants and Animals: Modelling

15:10 – 15:50 **Martin Schnittler** (University of Greifswald, Germany)
Spore Dispersal in Lower Organisms: From Model Assumptions to Reality

15:50 – 17:00 Tandem Lecture
Christoph Neinhuis (Technical University of Dresden, Germany)
Anita Roth-Nebelsick (State Museum of Natural History Stuttgart, Germany)
Transport Systems in Living Organisms

Free time for an individual walk through Dresden

19:30 – 23:00 Conference Dinner in the restaurant [Pulverturm](#)
(located in the historical centre of Dresden next to *Frauenkirche*)

Wednesday, August 26th, 2015

Morning Session

Chairs: **Wilfried Konrad** (Tübingen), **Hans Wiesmeth** (Dresden)

09:00 – 09:40 **Albrecht Fritzsche** (University of Erlangen-Nuremberg, Germany)
Spreading Innovations

09:40 – 10:20 **Manfred Wendisch** (University of Leipzig, Germany)
Diffusion Processes in Atmospheric Physics

10:20 – 10:50 Coffee break

Chairs: **Cornelia Breitkopf** (Dresden), **Boris B. Straumal** (Moscow)

10:50 – 11:30 **Rainer Klages** (Queen Mary University of London, UK)
Search for Food of Birds, Fish and Insects

11:30 – 12:10 **Søren Wichmann** (Leiden University, The Netherlands)
Language Migration: Empirical Data and Modelling

12:10 – 12:25 **Boris Bokstein**
(National University of Science and Technology MISiS, Moscow, Russia)
Short presentation of and invitation to Diffusion Fundamentals VII in Moscow 2017

12:25 – 13:05 **Marc-Olivier Coppens** (University College London, UK)
Nature-Inspired Transport Optimization

13:05 Final Remarks, Quick Lunch

15:00 Optional: Guided walk through the City of Dresden
(meeting point: tram stop "Synagoge", reached by lines 3 and 7)

A Springer textbook with the oral conference contributions is scheduled to appear in December 2016. The transparencies presented during the pre-school will be available already during the conference in the [download section of the website](#).