

**April 11 – 16 , 2021, Dagstuhl Seminar 21152**

## **Multi-Level Graph Representation for Big Data Arising in Science Mapping**

<https://www.dagstuhl.de/en/program/calendar/semhp/?semnr=21152>

Email list: [seminar-21152@rhea.dagstuhl.de](mailto:seminar-21152@rhea.dagstuhl.de)

We are looking forward to see you all tomorrow, 09:00 German time. For those joining remotely, please use

<https://dagstuhl-de.zoom.us/my/zoom.karlsruhe?pwd=c3poTkFsbmVERWwxDEFHVXRmT1BzZz09>

Meeting ID: 442 802 3780 Passcode: oDnQV4yt

Please also check the agenda at

<https://docs.google.com/document/d/1GVxowKCQCspPLynTroMAI73Rk1ObH-PJlwOsAGwN2Jc/edit?pli=1#>

Make sure your name is listed for a 10 min introduction in one of the first two days or for a 10-20minute research talk during the week. Please add a brief bio and picture at the end of the document.

Best regards,

Stephen & Katy

### **Agenda**

All times in CET. This is a **HYBRID** meeting. ALL zoom meetings will be recorded and slides will be collected and made available in the agenda ASAP.

Medina Sydykanova <[msydyka@iu.edu](mailto:msydyka@iu.edu)> will kindly help facilitate this meeting on Monday-Thursday 14:00-20:00. If you plan to attend but did NOT receive a Dagstuhl invite, please contact her and share your name and affiliation info.

In preparation of the seminar, please provide a pic, brief bio, and interest statement at the end of this document.

## Monday

07:30-08:45 *Breakfast*

09:00-09:15 Welcome by Katy Börner

09:15-10:00 Brief Introductions / Research Overviews

- Mohammad Khaledur Rahman, IU, "[BatchLayout: A batch-parallel force-directed graph layout algorithm in shared memory](#)"
- Martin Nöllenburg, TU Wien, Austria
- Francis Harvey, University of Leipzig
- [David Chavalarias](#), ISC-PIF

10-10:30 Overview Talk

- Katy Börner, IU: "Big Data Arising in Science Mapping" (30mins)

10:30-11:00 *Coffee Break*

11:00-12:00 Brief Introductions / Research Overviews

- Thomas Koehler, TU Dresden
- Kilian Buehling, TU Dresden
- Andrea Scharnhorst, DANS, NL;  
<https://pure.knaw.nl/portal/en/persons/andrea-scharnhorst>
- Ingo Günther, <https://ingogunther.com/worldprocessor>

12:15-13:00 *Lunch*

14:00 Introduction of Medina who will serve as the VCA Monday-Thursday 14:00-20:00.

14:10-15:00 Overview Talks (30mins each)

- Stephen Kobourov, UA: Welcome by Stephen & Multi-Level Graph Representations
- Sara Fabrikant, Department of Geography, University of Zürich: Cognitive research on landmarks, color, uncertainty & [The Future of Geographic Information Displays](#)

15:00-15:30 *Coffee Break* / Katy welcomes all to [Amatria's Virtual Birthday Party](#)

15:30-16:30 Brief Introductions / Research Overviews (10mins each)

- Andreas Bueckle, IU: [Science Map Metaphors: A Comparison of Network Versus Hexmap-Based Visualizations](#)
- Angela Zoss, Duke U: XXX

- Giuseppe di Battista: Schematic Representation of Large Biconnected Graphs
- Alexander Wolff, U Würzburg: Using the Metro Map Metaphor for Drawing Hypergraphs
- Guy Melançon, Vice President of Digital Transformation, Université de Bordeaux

16:30-18:00 Challenges & Opportunities and Discussion of Topics for Special Issue in IEEE Computer Graphics and Applications (Katy and Stephen)

*18:00-19:00 Dinner*

19:00-20:00 **WEBINAR** Special Event: Dagstuhl Exhibit Opening with Francis Harvey & Katy Börner