

**Newton-room Research Project – International Seminar  
December 12 and 13, 2023, Nord University, IPN**



**Venue:** Kieler Forschungswerkstatt, Am Botanischen Garten 16i, 24118 Kiel; Main Room:  
denk:labor

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**List of participants**

- Invited guests:
  - Michael Reiss, Professor of Biology Education, University College London
  - Magdalena Kersting, Assistant Professor of Science Education, University of Copenhagen
- Newton-room international partners
  - IPN:
    - Biology Education Department: Ute Harms, Professor of Biology Education; Katharina Düsing, Postdoc in Science Education; Carola Garrecht, Postdoc in Biology Education; Berit Czinczel, PhD
    - Chemistry Education Department: Ilka Parchmann, Professor of Chemistry Education; Katrin Knickmeier, PhD
    - Mathematics Education Department: Aiso Heinze, Professor of Mathematics Education; Kristin Litteck, PhD Candidate; Dunja Rohenroth, PhD Candidate; Femke Sporn, Postdoc
- Newton-room Bodø team
  - First Scandinavia
    - Lindsey Hendricks-Franco
    - Kjersti Gylseth
    - Pedrikke J. Votvik
    - Ingvill Berg
  - Nord University:
    - Wenche Rønning, Associate Professor in Pedagogy and Project Leader
    - Leonie Johann, Postdoc in Science Education
    - Marja van den Heuvel Panhuizen, Professor in Mathematics Education
    - Trine Soleng Nedregård, Research Assistant

## Programme

### December 11<sup>th</sup> – Most international participants arrive

Possibilities for a joined informal dinner for local and international participants at *Casa al Porto* at 19.00 pm for all participants who arrive at december, 11. (Please send e-mail to [leonie.johann@nord.no](mailto:leonie.johann@nord.no) if you wish to participate)

### Programme Day 1 - December 12<sup>th</sup>

- 09.00-09.20 Welcome by IPN and Nord University: Short presentations of participants
- 09.20-09.30 The Newton project, Wenche Rønning
- What is the Newton project?
  - Ongoing research within Newton at Bodø
- 09.30-10.15 Ilka Parchmann: Introduction to IPN
- IPN embedded into larger programmes regarding the development towards educational ecosystems
  - Ongoing research at IPN
- 10.15-10.30 Coffee Break
- 10.30-11.30 Talk by Michael Reiss: "Trends in science education"
- 11.30-12.15 Talk by Katharina: Insights into the VideT project: On developing video-based tools for 10th grade students to better understand the processes of scientific inquiry: (<https://www.leibniz-ipn.de/en/research/projects/videt>)
- 12.15-13.15 Lunch at the canteen
- 13.15-13.30 Introduction to Data Sessions, Leonie:  
First insights into primary school students' learning processes and a Newton teacher's reflections when designing a teaching unit about insects and bugs.
- 13.30-15.00 Data sessions and group discussions (including break) about selected video sequences from Newton Model about insects
- 15.00-15.30 Plenary discussion after group work
- 15.30-16.00 Talk by Wenche: "Teacher thinking about pupils' activity in Newton rooms"
- 16.15-17.15 Visit of Kieler Forschungswerkstatt by Katrin Knickmeier
- 18.30-19.45 Visit of Kiel's Christmas Market for those who are interested
- 20.00 Dinner at Lagom (Please send a mail to [leonie.johann@nord.no](mailto:leonie.johann@nord.no) if you **do not** wish to participate).

### Programme Day 2 - December 13<sup>th</sup>

- 08.30-08.45 Good morning, getting started
- 08.45-09.45 Talk by Magdalena Kersting: Language and Literacies in Science Education (45 min presentation, 15 min. questions)
- 09.45-10.15 Talk by Aiso: Mathematics Education Research at IPN
- 10.15-10.30 Coffee Break
- 10.30-11.15 Talk by Kristin: The German mathematics education approach of "Grundvorstellungen": How to link abstract math concepts with the real world exemplified by the concept slope of a function.

- 11.15-12.15 Lunch at the canteen
- 12.15-12.30 Introduction to Data Session, Leonie
- 12.30-13.45 Data sessions and group discussions about selected video sequences from Newton Module about fractions
- 13.45-14.00 Coffee Break
- 14.00-15.00 Plenary Discussion after Group work and talk by Leonie and Marja on using conceptual metaphors as lenses to understand fifth-grade students' understanding of fractions.
- 15.00-15.45 Discussion between groups of participants on shared research interests and future joint projects in the Newton project
- 15.45-16.00 Summing up and outlook