

Reading Group Program

Model Transfer in Science Spring/Summer 2024

Fridays, noon to 2pm via Zoom

Contact us if you want to join at catherine.herfeld@philos.uni-hannover.de

February 9: TALK by Alexandra Quack (Zurich), Narratives in Economic Modeling.

February 16: DISCUSSION and ORIENTATION (NOTE: we meet at 2pm to 3.30pm)

- ERC Grant Proposal MODEL TRANSFER

February 23: DISCUSSION (NOTE: we meet at 2pm to 3.30pm)

- Humphreys, P. (2019). Knowledge Transfer Across Scientific Disciplines. *Studies in History and Philosophy of Science Part A*, 77, 112–119.

March 8: DISCUSSION

- Tarja Knuuttila, Loettgers, A. (2023). Model Templates: Transdisciplinary Application and Entanglement. *Synthese*, 201 (200). <https://doi.org/10.1007/s11229-023-04178-3>.
- Knuuttila, T., Loettgers, A. (2014). Magnets, Spins, and Neurons: The Dissemination of Model Templates Across Disciplines. *The Monist*, 97, 280–300.

March 29: DISCUSSION

- Lehtinen, Aki (2021). Core Models in Macroeconomics. In *A Modern Guide to Philosophy of Economics*, Chapter 12. Cheltenham, UK: Edward Elgar Publishing.
- Fontana, Magda (2010). The Santa Fe Perspective on Economics: Emerging Patterns in the Science of Complexity, *History of Economic Ideas*, 18 (2), 167-196.

April 5: TALK by Max Noichl (Utrecht), Modeling Model Transfer

- Max Noichl (2023). How Localized are Computational Templates? A Machine Learning Approach. *Synthese*, 201 (107). <https://doi.org/10.1007/s11229-023-04057-x>.

April 26: TALK by Jeremias Düring (Wuppertal), Reaping the “Benefits of Interaction”

- Düring, Jeremias, Reaping the “Benefits of Interaction”: What Economic Pluralists Can Learn from Interactive Scientific Pluralism; draft.

May 3: DISCUSSION

- Anna Keuchenius et al. (2021). Adoption and Adaptation: A Computational Case Study of the Spread of Granovetter’s Weak Ties Hypothesis. *Social Networks*, 66, 10-25. <https://doi.org/10.1016/j.socnet.2021.01.001>.
- Mengjie Cheng et al. (2023). How New Ideas Diffuse in Science. *American Sociological Review*, 88 (3), 522-561. <https://doi.org/10.1177/00031224231166955>.

May 10: TALK by Caterina Marchionni (Helsinki), Progress in Economics

- Marchionni, Caterina: Progress in Economics; draft (with Till Grüne-Yanoff)

May 17: TALK by Wybo Houkes (Eindhoven), Cross-disciplinary Modeling

- Houkes, W. (2023). Embedding and Customizing Templates in Cross-disciplinary Modeling. *Synthese*, 201(79). <https://doi.org/10.1007/s11229-023-04076-8>

May 24: TALK by Till Grüne-Yanoff (Stockholm)

- Grüne-Yanoff, T. (2011). Models as Products of Interdisciplinary Exchange: Evidence from Evolutionary Game Theory. *Studies in History and Philosophy of Science Part A*, 42(2), 386–397.

June 7: TALK by Catherine Herfeld, (Hannover) Challenges to Model Transfer

June 14: TALK by Edoardo Peruzzi (Hannover), How Model Transfer Contributes to Template Production: The Case of Game Theory

- Edoardo Peruzzi, How Model Transfer Contributes to Template Production: The Case of Game Theory; draft.

June 21: TALK by Robert Batterman (Pittsburg), Minimal Model Explanations (**NOTE: we meet at 2pm**)

- Batterman, Robert W., Rice, Colin (2014): Minimal Model Explanations, *Philosophy of Science*, 81, 3, 349-376. <https://www.jstor.org/stable/10.1086/676677>
- Batterman, Robert W. (2021): *A Middle Way: A Non-fundamental Approach to Many-Body-Physics*, Oxford: Oxford University Press; chapters 5 and 6.

June 28: TALK by Mauricio Suarez (Madrid), *Inference and Representation: A Study in Modeling Science*

- Mauricio Suarez (2024): *Inference and Representation: A Study in Modeling Science*, Chicago: University of Chicago Press;
<https://press.uchicago.edu/ucp/books/book/chicago/I/bo207912978.html>

July 5: TALK by Justin Price (University of South Carolina), *Model Transfer and Conceptual Progress*.

- Price, J. (2020). Model Transfer and Conceptual Progress: Tales from Chemistry and Biology. *Foundations of Chemistry*, 22, 43–57.

July 12: TALK by Robert Evans (Cardiff), *Interactional Expertise*

- Collins, Harry, Evans, Robert, Gorman, Mike (2007): Trading Zones and Interactional Expertise, *Studies in History and Philosophy of Science*, 38, 657–666.

July 19: TALK by Murat Bakeev (Hannover), *A History of Agent-based Modeling at the Santa Fe Institute*.

- Bakeev, Murat, *A History of Agent-based Modeling at the Santa Fe Institute*; draft.