

Seminar organized by FunMat-II

AI and machine learning for materials design

Date: June 3, 2021
Time: 9.00-12.30
Place: Teams

Program

- 9.00 Welcome, short presentation of FunMat-II
Magnus Odén (Linköping University)
- 9.05 AI - What is it and Why is it important?
Fredrik Heintz (Linköping University)
- 9.30 Machine Learning - Principles of parametric modeling
Fredrik Lindsten (Linköping University)
- 9.55 Break
- 10.10 From data to knowledge
Claudia Draxl (Humboldt University of Berlin)
- 10.50 Machine-learning interatomic potentials for computational materials design
Alexander Shapeev (Skolkovo Institute of Science and Technology)
- 11.15 Break
- 11.30 Designing magnetic materials with machine learning
Anna Delin (KTH Royal Institute of Technology)
- 11.55 Database-driven High-Throughput Calculations and Machine Learning Models for Materials Design
Rickard Armiento (Linköping University)
- 12.20 Summary and conclusion
- 12.30 End of seminar



For any questions regarding the seminar, please contact:

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Register here >> <https://comm.ri.se/b/v/?vid=4007&v=1&share=1&ucrc=1E7A061D69>

No later than May 31.

Participation is free of charge for all participants, but registration is required.

FunMat-II (Functional Nanoscale Materials) is a second generation competence center in material science, financed by Vinnova (the Swedish agency for innovation systems). FunMat-II is focusing its efforts to three application areas: functional surfaces for cutting tools, fuel cells, and batteries. We obtain basic knowledge about materials behavior and the physics and chemistry of the synthesis processes, and design new materials with unique properties. Besides this, we study how the materials perform in specific applications. We study all aspects using combinations of theory, modelling, experiments, and field tests. The information obtained is generic and can be applied to a wide range of applications, which makes FunMat-II a true competence center in functional surfaces optimized at the nanoscale. For more information about FunMat-II: www.funmat-ii.se.

