

## Möjlig handledning inom datavetenskap våren 2017

- Ion Petre (<http://users.abo.fi/ipetre/>)  
Computational methods in systems biology  
in particular modeling of reaction networks, control-based approaches,  
methods for model comparison, quantitative model refinement  
Automata theory  
Mathematical structures in computer science
- Mats Aspnäs (<http://users.abo.fi/Mats.Aspnas/>)  
Parallell programmering  
Kodoptimering  
Tillämpningar av parallell programmering
- Sepinoud Azimi (<https://research.it.abo.fi/people/sazimi>)  
Quantitative model refinement  
Computational processes in living cells
- Mats Neovius (<http://users.abo.fi/Mats.Neovius/>) (till februari 2018)  
Modelling of context and context-awareness  
Modellering av mätningssystem på ett formellt följsamt sätt  
Ubiquitous systems  
Collaborative filtering (e.g. Netflix Spotify)  
Similarities and clustering
- Kristian Nybom (<https://research.it.abo.fi/people/knybom>)  
Trådlösa kommunikationstekniker  
Agila mjukvaruutvecklingstekniker  
Broadcasting-nätverk
- Luigia Petre (<http://users.abo.fi/lpetre/>) (tjänsteledig)  
Formal methods  
Refinement-based methods for software development  
Time- and space-dependent computing  
Integration of formal methods  
Network modeling and analysis  
Smart electrical grids  
Network-on-chip architectures  
Wireless sensor-actor networks  
Multi-core systems  
Non-functional properties  
Energy-aware computation  
Network availability

Annamari Soini (<http://users.abo.fi/soini/>)

Programmering  
IT-undervisning  
Könsroller inom IT  
Sociala aspekter inom IT

Kim Solin (<https://research.it.abo.fi/people/ksolin>)

Teoretisk datavetenskap  
Refinement Algebra  
Filosofi

Elena Troubitsyna (<http://users.abo.fi/Elena.Troubitsyna/>)

Dependable and resilient software-intensive systems  
Formal modelling and verification methods  
Model-driven engineering for dependability and resilience  
Safety-critical and fault tolerant systems  
Stochastic methods for dependability and resilience  
Integrated modelling approaches  
Cyber security

Marina Waldén (<http://users.abo.fi/marina.walden/>)

Formella metoder  
Integration med industritillämpningar  
Den formella utvecklingsprocessen  
Agila metoder  
Grafiska gränssnitt till FM (UML, Simulink)  
Distribuerade system  
Mobila distribuerade system (multi-robot system, kontrollsysteem för drönare)  
Systemspecifikationer

## Forskninglaboratorier

### **Computational Biomodeling Laboratory (Combio Lab)**

<http://tucs.fi/research/research-units/combio/>

**Forskningsledare:**

[Ion Petre](#)

### **Distributed Systems Laboratory (DS Lab)**

<http://tucs.fi/research/research-units/dslab/>

**Forskningsledare:**

[Luigia Petre](#)

[Marina Waldén](#)