Sigbjørn Løland Bore

Curriculum Vitae

Born: 11 August 1990, Stavanger, Norway
Address: Fagerborggata 44,
NO-0360 Oslo, Norway
Email: s.l.bore@kjemi.uio.no
Telephone: (+47) 928 81 237
Homepage: https://folk.uio.no/sigbjobo

Education

2015–now **PhD-student in theoretical chemistry**, University of Oslo (UiO). The thesis focuses on the Hybrid-particle-field method applied on biophysical systems, and is supervised by Michele Cascella.

2009-2012 **Masters in applied physics**, Norwegian University of Science and Technology
2014-2015 (NTNU). The thesis was titled *High-Resolution Large Time-Step Schemes for Hyperbolic Conservation Laws",* and was supervised by Jon Andreas Støvneng and Tore Flåtten.

2012–2014 **Masters in complex systems**, Université Pierre-et-Marie-Curie (UPMC). The thesis was titled *"Collective motion of dynamic spins",* and was supervised by Olivier Dauchot.

Experience

2015–2018 **Teaching in Physical chemistry (KJM1130) and Molecular modelling (KJM5630).**
As a part of my PhD-contract I have taught in Physical chemistry (KJM1130) and Molecular modelling (KJM5630). The teaching position was conducted through instruction of students at the physical chemistry lab and in the computer lab. In addition I have contributed as examiner in both courses, and in the making of assignments and exams in KJM5630.

2013 **Summer internship, The Curie Institute, Paris**
Summer internship title: Stochastic modeling of memory effects on the Hunchback gene activation in the fruit fly embryo.

2011 **Digitization of handwritten fluid mechanics compendium**
On my own initiative, I digitized a handwritten compendium in fluidmechanics for Prof. Iver Brevik. As of today, this compendium is still in use.

Skills

Languages:	Norwegian (first language), English (fluent), French (B2-level).
Programming:	FORTRAN, PYTHON, C++, MATLAB.
Markup:	HTML, LaTeX, Tikz.
Software:	GROMACS, NAMD, VMD, LAMMPS.

Awards

- 1st place in Gløsmesterskapet. Engineering knowledge competition between all study programs at NTNU.

Scientific articles

4. **SLB**, H. B. Kolli, T. Kawakatsu, G. Milano, M. Cascella, *Mesoscale electrostatics driving particle dynamics in non-homogeneous dielectrics,* submitted (2018)

3. H. B. Kolli, A. D. Nicola, **SLB**, K. Schäfer, G. Diezemann, J. Gauss, T. Kawakatsu, Z. Lu, Y. Zhu, G. Milano, M. Cascella, *Hybrid Particle-Field Molecular Dynamics Simulations of Charged Amphiphiles in Aqueous Environment,* Journal of Chemical Theory and Computation **14** (9), 4928–4937 (2018).

2. **SLB**, G. Milano, M. Cascella, *Hybrid Particle-Field Model for Conformational Dynamics of Peptide Chains,* Journal of Chemical Theory and Computation **14** (2), 1120–1130 (2018).

1. **SLB**, M. Schindler, K. N. T. Lam, E Bertin, O. Dauchot, *Coupling spin to velocity: collective motion of Hamiltonian polar particles,* Journal of Statistical Mechanics **3**, 033305 (2016).

Scientific presentations (selected)

4. *Molecular dynamics in a density dependent inhomogeneous dielectric.* Presentation at the National meeting of Norwegian Chemical Society, Lillestrøm, Norway (10.2018).

3. *Hybrid Particle-Field Model for Conformational Dynamics of Peptide Chains.* Poster presentation at CECAM workshop, University of Trento, Italy (08.2018).

2. *Coarse graining of protein backbone.* CTCC-seminar, Oslo, Norway (05.2016).

1. *Coarse grained models for proteins.* Presentation at the spring meeting of CTCC, Alta, Norway (04.2016).

Essays published in Norwegian newspapers

6. *Hverdagshykleri.* Opinion piece, Aftenbladet, (13.10.2018)

5. *Øyblikket da du blir voksen.* Back cover causerie, Klassekampen, (13.09.2018)

4. *Hund på bar.* Back cover causerie, Klassekampen, (02.06.2018)

3. *Ukultur hos havets kardinaler.* Back cover causerie, Klassekampen, (03.03.2018)

2. *Glem ikke å sette opp ølteltet.* Opinion piece, Universitas, (24.05.2017)

1. *Make Frederikke greit again.* Opinion piece, Universitas, (18.11.2016)