# Søren Gammelgaard

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# CURRENT EMPLOYMENT

# Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy

Post-doctoral researcher (Assegnista di Ricerca)

#### **EDUCATION**

## University of Oxford, Oxford, United Kingdom

DPhil in Mathematics

Oct 2018 – Sep 2022

- Thesis: Quiver Varieties and Moduli Spaces of Sheaves on Singular Surfaces
- Supervisor: Professor Balázs Szendrői
- Focus: Quiver varieties, singular surfaces, moduli spaces.

### University of Oslo, Oslo, Norway

MSc in Mathematics

Aug 2016 – Jun 2018

- Thesis: Cubic hypersurfaces, their Fano schemes, and special subvarieties
- Supervisor: Professor John Christian Ottem
- Focus: Cubic hypersurfaces, Fano schemes, Chow rings.
- · Grade awarded: A.
- BSc in Mathematics
  - Average grade: A.

Aug 2014 - Jun 2016

# CONFERENCES AND EXTERNAL TALKS

#### GAeLXXVII, Bucharest, Jun 2019

• Presented a poster about my work on Hilbert schemes of singular surfaces.

# UCL/KCL Junior Geometry Seminar London, Jan 2022

• I gave a talk about my work on moduli spaces attached to Kleinian singularities.

#### Algebraic Geometry Seminar, University of Oslo Oslo, Mar 2022

• I gave a talk about Hilbert schemes of Kleinian singularities and quiver varieties.

# Algebraic Geometry Seminar, KTH Royal Institute of Technology Stockholm, Apr 2022

• I spoke about my work on moduli spaces attached to Kleinian singularities.

#### Symplectic singularities in geometry and representation theory, CIRM, Marseille, Apr 2022

• At this research school, I again gave a talk about my work on moduli spaces attached to Kleinian singularities.

# A day of geometry in Glasgow, University of Glasgow, Aug 2022

Talked about the work in my doctoral thesis.

#### **PUBLICATIONS**

- [1] A. Craw, <u>S. Gammelgaard</u>, Á. Gyenge, and B. Szendrői, "Punctual Hilbert schemes for Kleinian singularities as quiver varieties," *Algebraic Geometry*, vol. 8, issue 6, pp. 680–704, Nov 2021. Available here.
- [2] A. Craw, S. Gammelgaard, Á. Gyenge, and B. Szendrői, "Quot Schemes for Kleinian Orbifolds," *SIGMA (Symmetry, Integrability and Geometry: Methods and Applications)*, vol. 17, no. 099, Nov 2021. Available here.

#### **PREPRINTS**

"Quiver Varieties and Framed Sheaves on Compactified Kleinian Singularities", available here.

#### **SCHOLARSHIP**

Aker Scholarship,

2018 - 2022

Scholarship with stipend for advanced graduate studies at a top international university.

### WORK EXPERIENCE

#### **University of Oxford**, Oxford, United Kingdom

- Several positions as Teaching Assistant and Tutor:
  - •Oct 2018 -Dec 2018: TA in Galois Theory.
  - •Oct 2019 –Dec 2019: TA in Galois Theory.
  - •Jan 2020 –Mar 2020: TA in Commutative Algebra.
  - •Jan 2021 -Mar 2021: TA in Algebraic Curves.
  - •Oct 2021 –Dec 2021: TA in Homological Algebra.
  - •Jan 2022 –Mar 2022: Tutor in Algebraic Curves.

# St Peter's College, University of Oxford, Oxford, United Kingdom

■ Tutor in Topology. Jan 2020 – Mar 2020

# **Department of Mathematics, University of Oslo**, Oslo, Norway

Several positions as Teaching Assistant, in Calculus and Linear Algebra.
Aug 2015 – Dec 2017

Sommerskolen Oslo (Oslo Summer School), Oslo, Norway

■ Taught mathematics at a summer school for high school students. 2016 – 2018

### OTHER ACTIVITIES

### Taruithorn, the Oxford Tolkien Society, University of Oxford

■ Secretary Jan 2021 – Feb 2022

• Responsibility for handling correspondence, booking external speakers, administrative work.

#### Balliol College Middle Common Room, University of Oxford

■ Secretary Jun 2019– Jun 2020

• Responsibility for scheduling meetings, taking minutes, setting agendas, and handling external correspondence.

**Matematisk Ordliste** (*Mathematical Wordlist*), University of Oslo, University of Agder, Norwegian University of Science and Technology, Norwegian Language Council,

Lexicography relating to algebraic geometry

May 2019

 I documented and suggested about 250 Norwegian translations from English of scientific terms in algebraic geometry and adjacent fields of mathematics.

#### **LANGUAGES**

• Norwegian, Danish: Native languages.

English: Fluent.

• French: Advanced (reading); basic (speaking, writing).

• Swedish: Advanced.

Japanese: Basic

# **DIGITAL SKILLS**

LATEX, Macaulay2, MATLAB, Python, Java, Microsoft Office, LibreOffice, Ubuntu.

**INTERESTS** 

Linguistics, cross-country skiing, fantasy literature, swimming.

# OTHER

Contestant for Norway at the 2014 International Mathematical Olympiad.

**INFORMATION** Danish citizen.

#### REFERENCES

#### Balázs Szendrői

**Professor of Mathematics** 

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# Alastair Craw

**Professor of Mathematics** 

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# John Christian Ottem

Professor

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 $[CV\ compiled\ on\ 2023-09-19]$