

# Davide PASSARO

## PERSONAL INFORMATION

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PLACE AND DATE OF BIRTH: Bari, Italy, January 1, 1996  
ADDRESS: Markelerbergpad 1503, 1105AW Amsterdam, The Netherlands  
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## EDUCATION

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FROM SEPT. 2020 Ph.D. in THEORETICAL PHYSICS, **Universiteit van Amsterdam**, Amsterdam  
Supervisor: Miranda Cheng

FROM SEPT. 2018 Master of Science in THEORETICAL PHYSICS, **Uppsala University**, Uppsala  
To MAY 2020 Thesis: “[Model building on gCICYs](#)”  
Advisor: Ass. Prof. Magdalena LARFORS, Robin SCHNEIDER  
GPA: 5/5

FROM SEPT. 2015 Bachelor’s degree in PHYSICS, **Università degli Studi di Milano**, Milan  
To JULY 2018 Graduating grade: 110/110 *cum laude*  
Thesis: “[Laplacian ground state eigenvalues of regular polygons](#)”  
Advisor: Prof. Luca Guido MOLINARI  
GPA: 29.56/30

FROM SEPT. 2010 Diploma di Maturità, **Liceo Scientifico Statale Leonardo Da Vinci**, Milan  
To JULY 2015 Graduating grade: 95/100 (top 13% of my class)

## PUBLICATIONS

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- Miranda C.N. Cheng, Sergei Gukov, Davide Passaro, Rak-Kyeong Song, Arnav Kabra. Machine learning Fermionic Forms. (To appear)
- Miranda C. N. Cheng, Ioana Coman, Piotr Kucharski, Davide Passaro, Gabriele Sgroi. 3D Modularity revisited. (To appear)
- Miranda C. N. Cheng, Ioana Coman, Davide Passaro, Gabriele Sgroi. Quantum modular  $\hat{Z}^G$ -Invariants. [arXiv:2303.03934 \[hep-th\]](#) (Accepted for publication with minor revisions on SIGMA)
- Miranda C. N. Cheng, Sungbong Chun, Boris Feigin, Francesca Ferrari, Sergei Gukov, Sarah M. Harrison, Davide Passaro. 3-Manifolds and VOA characters. [arXiv:2201.04640 \[hep-th\]](#) (Accepted for publication on Communications in mathematical Physics)
- Magdalena Larfors, Davide Passaro, Robin Schneider. Heterotic Line Bundle Models on Generalized Complete Intersection Calabi Yau Manifolds. *JHEP* **05** 2021(105), [arXiv:2010.09763 \[hep-th\]](#)

## TALKS GIVEN

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	Conference title	Talk title	
Jul 27 2023	<a href="#">Exact results and holographic...</a>	<a href="#">Reversing the orientation</a>	
Feb 27 2023	<a href="#">Learning Workshop on BPS States...</a>	<a href="#">Logarithmic vertex operator...</a>	
Feb 15 2023	<a href="#">Geometry and automorphy...</a>	<a href="#">Logarithmic vertex operator...</a>	video
Jun 29 2022	<a href="#">DRSTP Event Postgraduate AIO/OIO...</a>	<a href="#">Convolutional neural networks...</a>	

## CONFERENCES ATTENDED

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May 29 - Jun 1 2023 [DRSTP Event Postgraduate AIO/OIO School](#) Callantssoog

March 30-31 2023	<a href="#">SC on New Structures in Low-Dimensional...</a>	New York
Aug 1-5 2022	<a href="#">Making the bridge: Exploring new connections...</a>	Cambridge (UK)
Jul 11-15 2022	<a href="#">String Math</a>	Warsaw
May 2-5 2022	<a href="#">Strings and Geometry</a>	Utrecht

## COMPUTER SKILLS

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Basic Knowledge: LINUX, Git, bash scripting  
Intermediate Knowledge: Python, Sage-Math, C++, Mathematica,  $\text{\LaTeX}$ , Vim

## TEACHING EXPERIENCE

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Sep 2022-Aug 2023	Master thesis supervision	University of Amsterdam
Jun 2023	Reading course on Vertex Algebras	University of Amsterdam
Jun 2023	Numerical Methods for Statistical Physics	University of Amsterdam
Feb-Mar 2023	Advanced Quantum Field Theory	University of Amsterdam
Oct 2022	Seminars on Vertex Algebras	Academia Sinica
Jun 2022	Numerical Methods for Statistical Physics	University of Amsterdam
Feb-Mar 2022	Advanced Quantum Field Theory	University of Amsterdam
Feb-Mar 2021	Advanced Quantum Field Theory	University of Amsterdam

## LANGUAGES

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Mothertongue: ITALIAN, ENGLISH  
Basic Knowledge: SWEDISH

## OTHER INTERESTS AND ACTIVITIES

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Technology, Open-Source programming,  
World news, Kitesurfing, Traveling