Fran Globlek

Mathematical Physicist

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Education

SCUOLA INTERNATIONALE SUPERIORE DI STUDI AVANZATI | PhD

Oct 2018 – Ongoing | Trieste, Italy

→ PhD topic: Quantum Field Theories with Eight Supercharges and Isomonodromic Deformations, with advisors A. Tanzini & G. Bonelli

→ expected graduation date Sept 2022

UNIVERSITY OF ZAGREB, FACULTY OF SCIENCE, PHYSICS DEPARTMENT | MSc

Sept 2013 – July 2018 | Zagreb, Croatia

→ MSc thesis: "Factorization Algebras in QFT", under mentorship of Zoran Škoda

→ thesis defended 13 July 2018 with 4.953/5.000 GPA, summa cum laude

Publications and projects

COUNTING YANG-MILLS INSTANTONS BY SURFACE OPERATOR RENORMALIZATION GROUP FLOW | Published in Physical Review Letters

2021

→ joint work with advisors A. Tanzini & G. Bonelli

M2-BRANES AND DISCRETE PAINLEVÉ SYSTEMS | To be submitted

2021/22

→ joint work with N. Kubo, T. Nosaka, A. Tanzini & G. Bonelli

PAINLEVÉ EQUATIONS ON QUIVERS AND ORIENTIFOLDS | To be submitted

2021/22

→ joint work with advisors A. Tanzini & G. Bonelli

Talks

"Factorization Algebras and Observables" at the Spring school on Geometry and Topology in Hradec Králové, May 2018

"ABCDEFG of Gauge and Painlevé" at the XVI Avogadro Meeting at the GGI Firence, online, Jan 2021

Awards

2016/17   Scholarship of Excellence
2017/18   Scholarship of Excellence

Skills

LANGUAGES

Fluent:
Croatian • English • Russian • Italian

Rusty:
German • French

Learning:
Finnish

PROGRAMMING

Experienced:
Python, NumPy, Sage • LaTeX • Mathematica

Familiar:
C++

TOOLS/PLATFORMS

Git • Pelican • Docker • GNU/Unix • slurm-based cluster

Teaching

STUDENT TA

courses:
"Quantum mechanics", 2016/17 Summer semester
"Relativistic quantum physics", 2017/18 Winter semester

References

Alessandro Tanini, Full Professor, SISSA
✉ tanzini@sissa.it

Giulio Bonelli, Full Professor, SISSA
✉ bonelli@sissa.it