



UNIVERSITÀ
DI TRENTO

Dipartimento di
Matematica



PhD in Mathematics

**“Doc in Progress” and #iorestoacasa are pleased
to introduce you to**

Daniele Volpe

University of Trento

PhD in Mathematics

Geometric Møller operators in Algebraic Quantum Field Theory

Algebraic quantum field theory is a mathematically rigorous framework used to assign quantum algebras to classical field theories defined over globally hyperbolic spacetimes. In recent work with V. Moretti and S. Murro, we constructed a family of isomorphisms relating the algebras assigned to normally hyperbolic free field theories built out of different globally hyperbolic spacetimes. Our construction works if the globally hyperbolic metric tensors are equivalent through a relation we called "paracausal relation". In this talk I am going to briefly introduce this research area and the results we obtained in the paper.



Thursday, March 10 – at 16:00 CET

**The seminar will be held both in presence in Seminar Room “-1”
(Department of Mathematics) and online via Zoom.**

**To join the event, please contact docinprogress.unitn@gmail.com
using an institutional e-mail address for both reserving a sit in the
seminar room or obtaining login credentials.**