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related Workshop:
From perturbative to
non-perturbative QFT

14 – 16 June 2023

Stochastic Analysis meets QFT – critical theory

12 – 14 June 2023 | University of Münster, Germany

Over the last years, a number of new methods from stochastic analysis have been developed that allowed a new perspective on constructive field theory. While much progress has been made on controlling small scales for subcritical/ superrenormalisable models, much less is known regarding critical/just-renormalizable models. Matrix models and tensor models tend to be asymptotically safe and asymptotically free at their critical dimension. They are comparably simple and provide an ideal target to extend the stochastic analysis methods to critical dimension. The aim of this short workshop is to bring together some leading experts from both the stochastic analysis community and the QFT community to explore these exciting developments further.

Speakers

Nikolay Barashkov (Helsinki)
Roland Bauerschmidt* (Cambridge)
Yvain Bruned (Lorraine)
Ilya Chevyrev (Edinburgh)
Nguyen Viet Dang (Paris)
Margherita Disertori (Bonn)
Luca Fresta (Bonn)

*to be confirmed

Razvan Gurau (Heidelberg)
Martin Hairer (London)
Sabine Harribey (Stockholm)
Alexander Hock (Oxford)
Thomas Krajewski (Marseille)
Nicolas Perkowski (Berlin)

Organisers
Ajay Chandra (London)
Hendrik Weber (Münster)
Raimar Wulkenhaar (Münster)

Vincent Rivasseau (Orsay)
Hao Shen (Wisconsin)
Francesco de Vecchi (Bonn)
Fabien Vignes-Tourneret (Lyon)
Rongchan Zhu (Beijing)
Xiangchan Zhu (Beijing)
Nikos Zygouras (Warwick)

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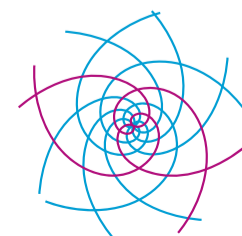
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