



## Progress in Group Field Theory and Related Quantum Gravity Formalisms

Guest Editors:

**Dr. Steffen Gielen**

School of Mathematical Sciences,  
University of Nottingham,  
Nottingham NG7 2RD, UK

**Dr. Sylvain Carrozza**

Perimeter Institute for  
Theoretical Physics, Waterloo,  
ON, Canada

**Dr. Daniele Oriti**

Max Planck Institute for  
Gravitational Physics (Albert  
Einstein Institute), Golm,  
Germany

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submissions:

**closed (30 June 2019)**

### Message from the Guest Editors

Dear Colleagues,

In recent years, the Group Field Theory (GFT) formalism for quantum gravity has seen significant progress in different directions: our understanding of its quantum geometric degrees of freedom has been deepened, new techniques have been developed towards GFT renormalisation, and the possibility of establishing a continuum limit; new connections between quantum gravity, condensed matter physics and quantum information have been explored; applications of GFT to the physics of cosmology and black holes point to possible novel resolutions of puzzles of classical gravity and represent promising avenues for connecting quantum gravity with observations. The many (conceptual and mathematical) relations and structural overlaps with other quantum gravity formalisms, such as random tensor models, loop quantum gravity, and lattice gravity, allow also to take advantage of the many developments occurring in them, which include both interesting results of direct implementation within GFT as well as inspiring advances towards shared goals. [...]

For more information, please visit [link](#).

Dr. Steffen Gielen  
Dr. Sylvain Carrozza  
Dr. Daniele Oriti  
*Guest Editors*





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### **Prof. Dr. Lorenzo Iorio**

Ministero dell' Istruzione e del  
Merito, Viale Unità di Italia 68,  
70125 Bari, Italy

## Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

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*Universe* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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