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## Particle Physics and Cosmology: A Themed Issue in Honor of Professor Dimitri Nanopoulos

Guest Editors:

**Prof. Dr. Jun-Jie Cao**

**Prof. Dr. Yungui Gong**

**Prof. Dr. Tianjun Li**

**Dr. Natsumi Nagata**

Deadline for manuscript  
submissions:

**1 September 2024**

### Message from the Guest Editors

Dear Colleagues,

Supersymmetry provides a natural solution to the gauge hierarchy problem in the Standard Model (SM). In the supersymmetric SM, we can achieve gauge coupling unification, have a dark matter candidate, and break electroweak gauge symmetry through a radiative process. In particular, gauge coupling unification strongly suggests the Grand Unified Theory (GUT). Also, string theory is a promising candidate for quantum gravity, and the supersymmetric GUT can be constructed from string theory. Moreover, supersymmetry provides a natural framework for inflation. Prof. Dimitri Nanopoulos is one of the leading experts in the world on particle physics, supersymmetry, GUTs, string model building, and cosmology.

This Special Issue is designed in honor of Prof. Dimitri Nanopoulos and to highlight the recent progress in particle physics and cosmology.

Prof. Dr. Jun-Jie Cao  
Prof. Dr. Yungui Gong  
Prof. Dr. Tianjun Li  
Dr. Natsumi Nagata  
*Guest Editors*



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# Special Issue



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## Editor-in-Chief

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

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## Message from the Editor-in-Chief

The multidisciplinary *Universe* journal 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 editorial board, I extend my welcome to this new journal and look forward to hearing from the interested contributors and learning about their valuable research.

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