

第 76 回 RESCEU コロキウム



東京大学大学院理学系研究科 附属ビッグバン宇宙国際研究センター

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場 所: 理学部 4 号館 1 階ピロティ RESCEU セミナー室

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Towards a Movie of the Real Universe with Differentiable Simulations and Raytracing

Abstract

Making a movie of the real universe requires reconstructing the initial conditions of the observed universe along with the physics for galaxy and star formation. We explain how the pieces of this process are coming together, and show new work on differentiable simulations (which allow recovery of the initial conditions necessary to reproduce any final galaxy/matter distribution) and the ray tracing sampler (which accelerates high-dimensional MCMC sampling particularly for neural networks). The remaining pieces, namely empirical models for galaxy and star formation are in progress, and expected to be completed in the next few years.

興味をお持ちの方の聴講を歓迎致します。