

## 学术报告

报告主题: Excavation and Spatial Analytical Methods used at Nilpena Ediacara National Park, South Australia

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报告时间: 11月6日(周四)上午10:00

报告地点:图书馆三楼报告厅

主办:全国重点实验室、科技处、人教处、

综合处



## Abstract:

The Ediacara Biota comprise a suite of mostly soft-bodied invertebrates with a global distribution during the terminal Neoproterozoic. One locality in which these fossils are found in abundance is Nilpena Ediacara National Park, South Australia, where exceptional preservation and unique excavation techniques have enabled the reconstruction of over 40 fossil bedding surfaces from the Ediacara Member of the Rawnsley Quartzite, with communities preserved *in situ*. This wealth of material has allowed the application of spatial analyses to compare the distributions of these early animal communities with those of modern ecosystems. Here, I discuss how different sessile and motile populations of Ediacaran taxa at Nilpena are distributed. These spatial patterns provide insight into their reproductive strategies, life histories, and responses to environmental heterogeneity.

## 报告人简介:

Phillip Boan 博士现为弗吉尼亚理工大学(Virginia Tech)博士后,曾于加州大学河边分校(UC Riverside)取得地球科学专业的理学博士学位,专长涵盖空间分析、野外测绘、地理信息系统分析(GIS)及古生物学。他目前的研究主要聚焦于埃迪卡拉生物群的古生物学与古生态学,并同时涉及诸如新元古代地质学、火星地质与地貌学以及金星火山学等其它相关交叉课题。他及所在团队揭示了埃迪卡拉纪晚期的远古生命形式与所处环境及物种间的相互作用机制,在Global & Planetary Change、Paleobiology等国际专业期刊发表多篇论文,为理解地球最早期复杂生态系统的结构特征提供了重要见解。