

报告 11

大数据时代的城市管理 – 以空气污染管理为例

Urban Management in the Big Data Era – The Case of Air Pollution Management

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讲者介绍 Biography

梁怡教授是香港中文大学未来城市研究所所长，亦为香港中文大学地理与资源管理学系研究教授，在不确定性分析、尤其在地理信息系统中的不确定性传播方面，进行具意义及创建性的研究。同时，他在基于模糊集理论的地理学分析进行开创性的研究，并且推广基于统计理论、粗糙集理论、可能性理论以及证据理论的不确定性分析。梁教授还致力于智能空间决策支持系统、空间数据挖掘和知识发现等领域的创新性研究。此外，他的研究课题还包括多目标的城市土地分配、最优交通路线规划、通讯网络、城市体系、城市化的遥感分析、以及水污染和空气污染管理。近年来，梁教授感兴趣的研究包括气候变化与人体反应，尤其在城市韧性方面。凭借其在空间分析和规划上的算法和计算的开创性研究，梁教授于 2007 年获得中国国家自然科学二等奖及中国教育部自然科学一等奖。他现任国际地理联合会地理系统建模委员会主席、中国地理学会数量与计量地理专业委员会主席。梁教授发表了 6 本学术著作、编辑了 2 本书籍，以及在具国际声誉的期刊、百科全书和书籍章节中发表了逾 180 篇学术文章。其代表作有：《空间数据中的知识发现》，柏林：Springer-Verlag，2010；《智能空间决策支持系统》，柏林：Springer-Verlag，1997；以及《不确定环境下空间分析与规划》，阿姆斯特丹：Elsevier，1988。

Prof. Yee Leung is the Director of the Institute of Future Cities and Research Professor of the Department of Geography and Resource Management at The Chinese University of Hong Kong. He has done significant research in uncertainty analysis in general and uncertainty propagation in geographical information systems in particular. He pioneers research in geographical analysis under fuzziness, and generalizes uncertainty analysis to various types of uncertainty using statistical theory, rough set theory, possibility theory and theory of evidence. He also engages in novel research in intelligent spatial decision support systems, and spatial data mining and knowledge discovery. He has done research on multi-objective urban land use allocation, optimal transportation route planning, communication networks, urban hierarchy, remote-sensing analysis of urbanization, and water and air pollution management. In recent years, he is interested in studying climate change and human response, particularly on city resilience. He is the recipient of the Second Prize of the National Natural Science Award in 2007, and the First Prize of the Ministry of Education Award in 2007 for his innovative research on algorithmic analysis and computation in spatial analysis and planning. He is currently Chair of the Commission on Modeling Geographical Systems of the International Geographical Union, and Chair of the Commission on Mathematical and Quantitative Geography of the Chinese Geographical Society. He has published six research monographs, two edited books, and over 180 refereed papers in reputed international journals, encyclopedias, and book chapters. His landmark research monographs are: Knowledge Discovery in Spatial Data, Berlin: Springer-Verlag, 2010; Intelligent Spatial Decision Support Systems, Berlin: Springer-Verlag, 1997; and Spatial Analysis and Planning under Imprecision, Amsterdam: Elsevier, 1988.