“深地科学与工程”公开课
力学与土木工程学院外专报告

报告专家：Tatiana Kiriaeva（俄罗斯自然科学研究院教授、俄罗斯科学院西伯利亚分院采矿研究所实验地质力学系主任）

报告时间：2026年11月2日—11月13日

报告题目：详见公开课安排表

报告地点：深地工程智能建造与健康运维全国重点实验室303会议室

邀请人：马占国（教授/博导）、翟翠霞（教授/博导）

报告专家简介：



Tatiana Kiriaeva is a professor, Doctor of Technical Sciences, and head of the Department of Experimental Geomechanics at the Institute of Mining of the Siberian Branch of the Russian Academy of Sciences. Her scientific research on the study of nonlinear geomechanics processes at great depths and the characteristics of the interrelationships between coal and methane, aimed at solving the problems of sudden outbursts during mining operations, has been published in 6 monographs, more than 170 scientific articles, and patents. She is the founder of the scientific field: Development of the theory of interaction between geomechanical and physicochemical processes in the development of coal deposits.

专家讲座时间安排

讲次 No.	日期 Date	星期 Day	周次 Week	时间 Time	讲座主题（英文） Lecture title (EN)	中文译名 Chinese title	主讲 Lecturer	地点 Venue
1	2026-11-02	周一 Mon	第9周 Week 9	**09:30–11:00**	Digital Twins for Underground Facilities and AI-Driven Early Warning Safety Systems. Part 1	**地下设施数字孪生与人工智能驱动的安全预警系统（上）**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
2	2026-11-03	周二 Tue	第9周 Week 9	**09:30–11:00**	Digital Twins for Underground Facilities and AI-Driven Early Warning Safety Systems. Part 2	**地下设施数字孪生与人工智能驱动的安全预警系统（下）**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
3	2026-11-06	周五 Fri	第9周 Week 9	**09:30–11:00**	Interaction of Geomechanical and Physicochemical Processes in Kuzbass Coal	**库兹巴斯煤中地质力学与物理化学过程的相互作用**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
4	2026-11-09	周一 Mon	第10周 Week 10	**09:30–11:00**	Nonlinear Deformation–Wave Processes in Various Rank Coal Specimens Loaded to Failure under Varied Temperature	**不同煤阶煤样在变温条件下加载至破坏的非线性变形—波动过程**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
5	2026-11-09	周一 Mon	第10周 Week 10	**18:30–20:00**	Theoretical Fundamentals to Describe Interaction of Geomechanical and Physicochemical Processes in Coal Seams	**描述煤层中地质力学与物理化学过程相互作用的理论基础**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
6	2026-11-10	周二 Tue	第10周 Week 10	**09:30–11:00**	Operator of Connection between the Langmuir Equation and Oparin's Kinematic Equation for Pendulum-Type Waves (Lecture 6)	**朗缪尔方程与奥帕林摆型波运动学方程之间的关联算子（一）**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
7	2026-11-13	周五 Fri	第10周 Week 10	**09:30–11:00**	Operator of Connection between the Langmuir Equation and Oparin's Kinematic Equation for Pendulum-Type Waves (Lecture 7)	**朗缪尔方程与奥帕林摆型波运动学方程之间的关联算子（二）**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**
8	2026-11-13	周五 Fri	第10周 Week 10	**14:30–16:00**	Topicality of the Framework and General Theory for Safe Deep-Level Mining of Hydrocarbon-Bearing Formations	**深部含油气地层安全开采框架与总体理论的现实意义**	Tatiana Kiriaeva	**深部国重303 State Key Lab, Rm 303**