



## Mathematical Communication during the Cold War Oxford, 8th July 2016

*Venue: Lecture Room L5, Mathematical Institute, Andrew Wiles Building, Oxford*

This is an afternoon of talks devoted to issues surrounding international communications (or lack thereof) in Cold War mathematics: the extent to which mathematicians on one side of the Iron Curtain were able to communicate with counterparts on the other, or even with colleagues on the same side. The goal is to gain a deeper understanding of the ways in which the political climate of the twentieth century both helped and hindered the development of mathematics.

This event is free to attend and accessible to all. The talks will run to around 45 minutes, allowing ample time for questions and discussion.

14:00–15:00 HELENA DURNOVÁ (Masaryk University, Brno)

*An American Mathematician with a Czech Name:  
Václav Hlavatý (1894–1969)*

15:00–16:00 SNEZANA LAWRENCE (Bath Spa University)

*What to teach? Mathematics Education during the Cold War*

16:00–17:00 CHRISTOPHER HOLLINGS (University of Oxford)

*“Dispelling Ignorance and Overcoming Prejudice”:  
Breaching the Language Barrier in Cold War Mathematics*

17:00–18:00 Drinks reception

This event is supported by a Scheme 1 Grant from the London Mathematical Society; the drinks reception is kindly sponsored by the Oxford Mathematical Institute. The financial contributions of both bodies are very gratefully acknowledged.



## ABSTRACTS

HELENA DURNOVÁ (Masaryk University, Brno)

*An American Mathematician with a Czech Name: Václav Hlavatý (1894–1969)*

In the interwar period, the Czechoslovak Václav Hlavatý belonged to the wide-ranging community of differential geometers. After World War II, Hlavatý, like many other mathematicians, attempted to continue in his work in the new situation. While it is commonly assumed that mathematicians in the Soviet bloc were not directly affected by the materialist worldview, this was not the case with Václav Hlavatý. After he had emigrated to the US in 1948 (Indiana University, Bloomington), he became deeply involved in exile politics, and politics at large also affected his work: he was involved in military grants in the US; his pre-war library had to stay back in Prague and he could not have it sent over; the third volume of his *Projective geometry* was never published, although it was ready to be printed; and last, but not least, he was ignored by his fellow countrymen. In my talk, I will look at the background behind Hlavatý's decisions, thus showing the complexity of the life of a mathematician working under Cold War conditions, with the emphasis on the choice of research topic.

SNEZANA LAWRENCE (Bath Spa University)

*What to teach? Mathematics Education during the Cold War*

This talk will explore the issues of communication during the Cold War between the countries on the opposing side of the Iron Curtain, focusing on the issues related to mathematics education. It will explore the building of a type of consensus about what constitutes good mathematics education and will trace and compare the problems of mathematics education. These 'problems' will further be defined as both those of the different systems, and the actions Eastern and Western governments tried to address through mathematics education reforms, and the actual mathematical problems which became foci of the developments on the opposing sides of the Wall. By looking at the latter, we will conclude by examining how mathematical problem solving was further promoted via the International Mathematics Olympiad in the Eastern Bloc and how this in turn became a global phenomenon at the end of the Cold War.

CHRISTOPHER HOLLINGS (University of Oxford)

*"Dispelling Ignorance and Overcoming Prejudice": Breaching the Language Barrier in Cold War Mathematics*

I discuss the nature of the language barrier in Cold War mathematical communication, and assess the abilities and efforts of various parties to overcome it: for example, the use of Western European languages in Soviet papers, the publication of a journal entirely in French, German and English in what was then Czechoslovakia, and the attempts to educate Western native-English-speaking mathematicians in the use of other languages. In the final part of the talk, I focus specifically on English-speaking Westerners and assess the effectiveness of scientific foreign-language teaching and the impact of the systematic translation of Soviet resources.