



# Frontiers of Mathematics Lecture

## The Grothendieck group of unipotent representations; a new basis

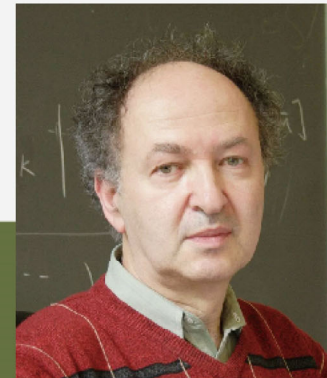
### Abstract

The group in the title has a remarkable new basis. We will explain it in the special case of type B, C.

### Biography

George Lusztig is the Abdun-Nur Professor of Mathematics at MIT. He received his Ph.D. from Princeton University in 1971. He worked at the University of Warwick from 1971 to 1977. He joined the MIT mathematics faculty in 1978 and was appointed Norbert Wiener Professor at MIT from 1999 to 2009.

Professor Lusztig is famous for his work on geometric representation theory and algebraic groups. He has received numerous prestigious awards, including the Berwick Prize of the London Mathematical Society (1977), the AMS Cole Prize in Algebra (1985), the Brouwer Medal of the Dutch Mathematical Society (1999), the AMS Leroy P. Steele Prize for Lifetime Achievement (2008), the Shaw Prize (2014) and the Wolf Prize in Mathematics (2022). Professor Lusztig is a Fellow of the Royal Society (1983), Fellow of the American Academy of Arts & Sciences (1991), and Member of the National Academy of Sciences (1992).



**Professor George LUSZTIG**  
(*Massachusetts Institute of Technology*)

Date :  
December 6, 2023 (Wednesday)

Time :  
09:30 – 10:30 am  
(Refreshments at 10:30 am)

Venue :  
T5, Meng Wah Complex,  
The University of Hong Kong