

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

## **MINI LECTURE SERIES**

# **Vanishing theorems and the Frobenius map**

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### **Abstract**

To prove Verlinde formula by degeneration method, one has to prove vanishing theorems for moduli spaces of parabolic sheaves on curves (include nodal curves). In the first talk, I will recall my proof for curves of genus at least 2 (JAG, 2000). Then, in the second talk, I will show how to remove the restriction of genus by using the Frobenius map (joint work with Ming-Shuo Zhou).

Lecture 1:	June 16, 2015 (Tuesday) 2:30 - 4:00pm
Lecture 2:	June 17, 2015 (Wednesday) 2:00 - 3:30pm

**Room 210, Run Run Shaw Bldg., HKU**

*All are welcome*