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Joshua L Flynn* (joshua.flynn@uconn.edu), 341 Mansfield Rd, University of Connecticut, Storrs, CT 06268, and **Guozhen Lu** and **Qiaohua Yang**. *Hardy-Sobolev-Maz'ya and Adams Inequalities on Quaternionic Hyperbolic Spaces.*

In this talk, we present our recent results concerning the Hardy-Sobolev-Maz'ya and Adams inequalities on the quaternionic hyperbolic spaces. This is done by obtaining precise heat kernel convolution estimates and using the Fourier analysis techniques available for rank one symmetric spaces. Our results extend the recent works on Hardy-Sobolev-Mazya inequalities on both real and complex hyperbolic spaces by G. Lu and Q. Yang and Hardy-Adams inequalities by J. Li, G. Lu and Q. Yang to quaternionic hyperbolic spaces. This is a joint work with G. Lu and Q. Yang. (Received January 18, 2021)