

1139-49-189

**Fengbo Hang\*** ([fengbo@cims.nyu.edu](mailto:fengbo@cims.nyu.edu)), 251 Mercer Street, New York, NY 10012, and **Paul C Yang**. *A perturbation approach for Paneitz energy on standard three sphere.*

We discuss a new proof of the sharp inequality for Paneitz operator on the standard three sphere, in the spirit of subcritical approximation for the classical Yamabe problem. To solve the perturbed problem, we use a symmetrization process which only works for extremal functions. This gives a new example of symmetrization for higher order variational problems. (Received February 09, 2018)