1114-11-142   **Xinyi Yuan*** (`yxy@math.berkeley.edu`), Berkeley, CA 94702. *On the Averaged Colmez Conjecture.*

The Colmez conjecture expresses the Faltings height of a CM abelian variety in terms of the logarithmic derivatives of certain Artin L-functions. In this talk, I will present an averaged version of the conjecture proved in my joint work with Shou-Wu Zhang. Combining with the recent work of Jacob Tsimerman, the Andre-Oort conjecture for Shimura varieties of abelian type is confirmed. A slightly weaker version of the averaged conjecture is proved by Andreatta, Goren, Howard and Madapusi-Pera. (Received August 22, 2015)