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Jinho Baik*, 530 Church Street, Ann Arbor, MI 48103. *Fluctuations of the free energy of spherical spin glass.*

We consider the spherical spin glass model, also known as the spherical Sherrington-Kirkpatrick (SSK) model. We show that the limit of the law of the fluctuations of the free energy is given by the GOE Tracy-Widom distribution in the low temperature regime and by the Gaussian distribution in the high temperature regime. Non-Gaussian interactions are also discussed. This is a joint work with Ji Oon Li. (Received July 28, 2015)