1017-11-125   **Heekyoung Hahn*** (`hahn@math.rochester.edu`), Dept. of Mathematics, University of Rochester, Rochester, NY 14627. *On zeros of Eisenstein series for genus zero Fuchsian groups.*

Let $\Gamma \leq \mathrm{SL}_2(\mathbb{R})$ be a genus zero Fuchsian group of the first kind with ∞ as a cusp, and let E_k^Γ be the holomorphic Eisenstein series of weight $2k$ on Γ that is nonvanishing at ∞ and vanishes at all the other cusps (provided that such an Eisenstein series exists). Under certain assumptions on Γ and on choice of its fundamental domain we prove that there is a constant $C_{\Gamma,\mathcal{F}}$ depending on Γ and the fundamental domain $\mathcal{F}$, but not the weight k such that all but possibly $C_{\Gamma,\mathcal{F}}$ of zeros of E_k^Γ lie on a certain subset $\{z \in \mathfrak{H} : j_\Gamma(z) \in \mathbb{R}\}$, where $\mathfrak{H}$ is the complex upper half-plane and j_Γ is the canonial hauptmodul for Γ. (Received February 17, 2006)

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