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Tim Huber* (hubertj@utpa.edu), University of Texas - Pan American, Edinburg, TX 78539,
and **Richard Charles** and **Andoni Mendoza**. *Symmetric parameterizations for quintic
Eisenstein series.*

In his Lost Notebook, Ramanujan gave product expansions for a pair of weight-two Eisenstein series of level five. We demonstrate that Ramanujan's formulas are special cases of more general parameterizations for quintic Eisenstein series. In particular, the Eisenstein series for the Hecke subgroup of level five are expressible as homogeneous polynomials in two parameters closely connected with the Rogers-Ramanujan continued fraction. Moreover, the coefficients of each polynomial are symmetric in absolute value about the middle terms. Corresponding polynomial expansions for allied series, including Eisenstein series on the full modular group, are also derived. (Received September 20, 2011)