Ramanujan's forty identities for the Rogers-Ramanujan functions

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L. J. Rogers and S. Ramanujan defined two functions independently, now known as Rogers-Ramanujan functions. In 1975, B. J. Birch found Watson's handwritten copy of Ramanujan's list of forty identities for Rogers-Ramanujan functions in the Oxford University Library. In this talk, Rogers-Ramanujan functions and several proofs of Ramanujan's forty identities are introduced and discussed.