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Time: 4:30 PM - 5:30 PM

Title: *Ramanujan's ψ_1 | ψ_1 sum*

Abstract: It is now a hundred years since Ramanujan passed away. In his lifetime, he wrote his results in a few notebooks, and it has taken nearly a hundred years for mathematicians to prove all his results. We know him as one of the greatest geniuses this world has seen; but how many of his results do you know? In the first talk in the Ashoka Mathematics Colloquium this year, I presented a few of his continued fraction results. The purpose of this talk is to present another result of Ramanujan. This result generalizes Jacobi's triple identity and simultaneously the Beta integral. We present a proof due to Mourad Ismail which has been described as the "Proof from the Book" for this result. We also show some classical identities which follow from his identity. Much of the material we present is taken from the lectures on Special Functions given by Dick Askey.