Tradition and Transmission The Kahane legacy

February 15, 2018

This lecture is a continuation of the Onsager lecture. The goal of this second lecture is to bridge the gap between (1) some new results on irregular sampling, (2) a problem raised by Jean-Pierre Kahane on mean-periodic functions, and (3) the existence of new Poisson summation formulae. Mean-periodic functions will be carefully defined in this talk. The theory of mean-periodic functions was elaborated by Jean Delsarte, Bernard Malgrange and Laurent Schwartz. The spectacular connection between (1), (2), and (3) was never observed before and is raising fascinating mathematical problems.