

Thursday, May 27<sup>th</sup>, 12:00

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## Joint BCAM-UPV/EHU Analysis and PDE seminar: On Montgomery's pair correlation conjecture: a tale of three integrals

A classic Montgomery conjecture (1973) is closely related to the behavior of the zeros of the Riemann zeta function. The works of Gallagher, Mueller, Goldston, Gonek and Montgomery establish equivalences of the Montgomery conjecture with the asymptotic behavior of 3 integrals. In this talk, we will discuss how we can substantially improve the known upper and lower bounds for these integrals using Fourier analysis. This is a joint work with Emanuel Carneiro (ICTP-IMPA), Vorrapan Chandee (Kansas State University) and Micah B. Milinovich (University of Mississippi).

Link to the session:

<https://zoom.us/j/95380449193?pwd=TGRkQnYxZUdwREpSc0RyRTIya2gwZz09>

More info at <https://sites.google.com/view/apdebilbao/home>