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On the Sets of Complex Numbers with Specific Approximation Order

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Abstract: In this talk, we introduce some metric results on the Diophantine approximation of complex numbers. More precisely, let ψ be a positive non-increasing function that tends to zero at infinity, we obtain the Hausdorff and packing dimensions of the sets of ψ -well approximable and ψ -exact approximable complex numbers. These results can be viewed as the analogues of the classical Jarník Theorem in the real case.

Date: 29 July 2022 (Friday) Time: 2:30 pm – 3:30 pm

Venue: Room 222, Lady Shaw Building,

The Chinese University of Hong Kong, Shatin

All are Welcome!