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Generalized arcsine laws for interval maps with indifferent fixed points

We present a distributional limit theorem for the occupation ratio measures of interval maps with a finite number of indifferent fixed points. This limit theorem is a multiray extension of Thaler's generalized arcsine laws [3] for interval maps with two indifferent fixed points, and is inspired by studies (e.g., [1]) of occupation times of diffusion processes on multiray. This talk is based on a joint work [2] with Kouji Yano (Kyoto University).

References

[1] M. Barlow, J. Pitman and M. Yor, Une extension multidimensionnelle de la loi de l'arc sinus, in *Séminaire de Probabilités, XXIII*, 294–314, Lecture Notes in Math., vol. 1372, Springer, Berlin, 1989.

[2] T. Sera and K. Yano, Multiray generalization of the arcsine laws for occupation times of infinite ergodic transformations, Preprint available at arXiv:1711.03260.

[3] M. Thaler, A limit theorem for sojourns near indifferent fixed points of one-dimensional maps, *Ergodic Theory Dynam. Systems* **22**, no. 4, 1289–1312, 2002.