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# PENCILS OF STRAIGHT LINES IN LOGARITHMIC POTENTIALS

MIRA-CRISTIANA ANISIU and VALERIU ANISIU

**Abstract.** The aim of the planar inverse problem of dynamics is to find the potentials under whose action a material point of unit mass, with appropriate initial conditions, describes the curves in a given family. We solve the following special problem: determine the finite Borel measures, with support in the unit circle, whose logarithmic potentials give rise to a family of lines passing through a given point.

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**Key words.** Inverse problem of dynamics, logarithmic potential.

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*Institutul de Calcul Tiberiu Popoviciu*
*C. P. 68, Cluj-Napoca*
*E-mail:* mira@math.ubbcluj.ro
*Universitatea „Babeş-Bolyai"*
*Str. Kogălniceanu nr.1*
*400084 Cluj-Napoca, România*
*E-mail:* anisiu@math.ubbcluj.ro