

---

**Mark Elin, Victor Goryainov, Simeon Reich, and David Shoikhet**

**Fractional Iteration and Functional Equations for Functions Analytic in the Unit Disk**

CMFT 2 No.2 (2002), 353–366. [ISSN 1617-9447]

**Abstract.** We establish criteria for the embeddability of an analytic function into a semigroup of analytic self-mappings of the open unit disk. We do this by studying properties of solutions to the Abel and Schröder functional equations.

**Keywords.** Embeddability, fractional iteration, functional equation, infinitesimal generator, Koenigs function, semigroup of analytic functions.

**2000 MSC.** 30D05, 39B12, 39B32.

**Received.** December 21, 2002.