

1094-47-50

J. E. Pascoe* (jpascoe@math.ucsd.edu), Department of Mathematics, University of California, San Diego (UCSD), 9500 Gilman Drive # 0112, La Jolla, CA 92093-0112. *Operator monotone functions in several variables.*

A function $f : (a, b) \rightarrow \mathbb{R}$ is *operator monotone* if $A \leq B$ implies $f(A) \leq f(B)$ for any pair of operators A, B with spectrum contained in (a, b) . In 1934, Charles Löwner proved operator monotone functions analytically continue to functions on the upper half plane which themselves map into the upper half plane. We show that there is a similar description of operator monotone functions in several variables.

This is part of a joint work with Ryan Tully-Doyle. (Received August 01, 2013)