THE UNIVERSITY
of **NORTH CAROLINA**
at **CHAPEL HILL**

Undergraduate Research Seminar

October 10, 2023
3:00 - 4:00 p.m.
Zoom

On Liouville's theorem for conformal maps

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Abstract. A theorem of Liouville asserts that the simplest conformal transformations on Euclidean space—translations, dilations, reflections, and inversions—generate all conformal transformations when the dimension is at least 3. I will describe a new proof of this theorem which is shorter and more elementary than the argument, due to Nevanlinna, found in most modern textbooks.