ON CONSTRUCTING ENTIRE FUNCTIONS BY QUASICONFORMAL FOLDING

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The problem of deciding which classes of entire functions can have wandering domains has roots in Sullivan's no wandering domain theorem [Sul85] for rational maps. Shortly afterwards the proof was adopted to show that transcendental maps with finitely many singular values can not have wandering domains [GK86], [EL87]. It was already known that for general transcendental entire maps with unbounded singular set, wandering domains can exist. The Eremenko-Lyubich class \mathcal{B} consists of those transcendental maps whose singular set is bounded. In [Bis14], Bishop constructs an entire function in \mathcal{B} with wandering domain. We exposit first the main theorem in [Bis14] which is a more general method for constructing entire functions with prescribed critical and singular values. Then we explain how this theorem is applied to construct functions in \mathcal{B} with wandering domain.

References

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