

Spiders web escaping sets

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We discuss examples of functions for which the escaping set $I(f)$ has the structure of a ‘spider’s web’. In particular, we consider the case that a subset $A_R(f)$ of the fast escaping set $A(f)$ has this structure. In this case the function has many strong dynamical properties, and both Eremenko’s conjecture and Baker’s conjecture hold as discussed in [2]. Further, the escaping set has a very intricate structure as described in [2] and [1]. We conclude by giving examples for which the ‘quite fast escaping set’ $Q(f)$ is a spider’s web (by results in [3]) but $A(f)$ is not, as shown in [4].

References

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- [4] P.J. Rippon and G.M. Stallard, A sharp growth condition for a fast escaping spider’s web. In preparation.