

# The structure of spider's web fast escaping sets

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Building on recent work by Rippon and Stallard, we explore the intricate structure of the spider's web fast escaping sets associated with certain transcendental entire functions. Our results are expressed in terms of the components of the complement of the set (the 'holes' in the web). We describe the topology of such components and give a characterisation of their possible orbits under iteration. We show that there are uncountably many components having each of a number of orbit types, and we prove that components with bounded orbits are quasiconformally homeomorphic to components of the filled Julia set of a polynomial. We also show that there are singleton periodic components and that these are dense in the Julia set.

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