FATOU'S WEB AND NON-ESCAPING ENDPOINTS

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Let f be Fatou's function, that is, $f(z) = z+1+e^{-z}$. We show that the escaping set of f, which consists of all points that tend to infinity under iteration, has a structure known as a spider?s web. We discuss a consequence of this result concerning the non-escaping endpoints of the Julia set of f. More specifically, we prove that the set of non-escaping endpoints together with infinity form a totally disconnected set.