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Lex G Oversteegen* (overstee@math.uab.edu), UAB Mathematics, Birmingham, AL 35294, and A Blokh, uab, Birmingham, AL 35294. The Julia sets of basic uniCremer polynomials of arbitrary degree.

Call a polynomial P a basic uniCremer polynomial if no two periodic rays land at the same point and there exists a Cremer periodic point. We study their Julia sets. Our main topological result shows that under certain conditions an invariant continuum of a holomorphic map contains a non-repelling fixed point. We use it to show that there are only two possible types of basic uniCremer Julia sets. First, there are so-called *red dwarf* Julia sets J which are nowhere connected im kleinen and for which the intersection of all impressions is a continuum in J containing the Cremer point and the orbits of all critical images. Second, there are *solar* Julia sets for which the set of all angles with degenerate impressions disjoint from other impressions contains all angles with dense orbits and a dense in S^1 set of periodic angles so that the Julia set J is connected im kleinen at the landing points of their rays. The quadratic case had been considered previously using different tools. (Received September 05, 2007)