Abstract: The Julia set of a meromorphic function is the set of "chaotic points", i.e., the set of all points that have no neighborhood under which the iterates of the function form a normal family. In absence of a rich holomorphic function theory in higher dimensions, the right substitute in complex dynamics are uniformly quasiregular (UQR) maps. Which Cantor sets can appear as Julia sets of UQR maps? How (topologically) complex can such sets be? This talk is based on joint works with Alastair Fletcher and Daniel Stoertz.