Gluing methods for the fractional Yamabe problem with isolated singularities

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We construct solutions for the fractional Yamabe problem with isolated singularities, $(??)^s u=u^{s?}$. When the singular set is just one point, a Delaunay type solution may be constructed by solving a non-local ODE. In the case of a finite number of singularities, we succesfully use a gluing method despite the nonlocality of the problem. This is joint work with Weiwei Ao, Azahara DelaTorre and Jucheng Wei.