A gluing construction for anti-self-dual Poincaré-Einstein metrics

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I am going to explain my approach to establish a boundary connected-sum theorem for asymptotically hyperbolic anti-self-dual Einstein metrics on four-manifolds. In the beginning, I am going to explain a similar construction by Mazzeo and Pacard for asymptotically hyperbolic Einstein metrics and then I explain how we may have a similar construction for our problem using definite SO(3)-connections as "potentials" for our Riemannian metrics.