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**Inverse scattering construction of dipole black rings**

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It is well known that  $D$ -dimensional vacuum gravity with  $D-2$  commuting Killing vectors is integrable. For such theories an efficient solution-generating technique has been available since it was first presented by Belinski and Zakharov in 1978. This method, which was later improved by Pomeransky, has been successfully used to discover new black hole solutions, most notably in five spacetime dimensions.

I will first demonstrate how this technique can be employed in six dimensions to generate regular and asymptotically flat dipole black rings in the five-dimensional Einstein-Maxwell-dilaton theory obtained by Kaluza-Klein reduction. This approach allows us to systematically construct Emparan's dipole black ring in the theory under consideration. Secondly, I will exploit this method to generate more general black ring solutions than those previously known. These solutions, whose existence has been conjectured, display rotation along the two orthogonal planes and electric charge in addition to a non-conserved magnetic dipole charge.