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## The recent results on sesqui-regular graphs with smallest eigenvalue at least $-3$

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**Abstract:** In 2018, Koolen, Yang and Y. proved that if a graph with smallest eigenvalue at least  $-3$  has very large minimal valency, then this graph is 2-integrable. Recently, we found that when a sesqui-regular graph with smallest eigenvalue at least  $-3$  has large minimal valency, it is 1-integrable. Furthermore, we characterized 1-integrable sesqui-regular graphs with smallest eigenvalue at least  $-3$ . In this talk, I will show the details of our results, which is joint work with Jack Koolen, Brhane Gebremichel, Masood Ur Rehman and Jae Young Yang.