

# An invitation to the classical and quantum integrable systems

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**Abstract:** The integrable systems is an interesting area of research in the mathematical physics and it has led to many advancement in the pure mathematics. In the first half of this talk, I will briefly explain what an integrable system is in the classical setting and discuss the the Lax pair formalism. Then in the second half of talk, we will visit the quantum integrable systems and present the quantum inverse scattering method which was developed in the seminal work of Fadeev et al.