スーパーグローバルコース数学基礎講義

Shuffle algebras, integrable systems and Bethe equations

2016 年 7/19 (火) ~ 7/22 (金)

7 月 19 日（火） 14:45 -16:45
7 月 20 日（水） 14:45 -16:45
7 月 21 日（木） 13:00 -15:00
15:00 -17:00
7 月 22 日（金） 14:45 -16:45

京都大学理学研究科 3 号館 127 大会議室

Bethe equations appear when you try to find eigenvalues of Hamiltonians from quantum integrable systems. There are many very different constructions of integrable systems but Bethe machinery seems to be universal, and it is rather unclear why. May be because of lack of understanding - we just do not know the better tools.

In my lectures I will try to explain some recent results about KdV-like systems. People suspected that Bethe equations have to be involved when you studying eigenvalues but situation was very unclear. Now we have some progress. New ideas ideologically not far from so called AGT-conjecture. It means that new approach uses the ideas from geometry of instanton manifolds.

No particular knowledge on representation theory is required.

❖学部生および大学院の学生には 1 単位認定されます

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