

Talk 14, 13:10–

Commensurate-Incommensurate change in spin systems

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In quantum spin chains, it has been observed that the incommensurability occurs near the VBS-type solvable points, and the correlation length becomes shortest at VBS-type points. We have proposed a mechanism to explain the onset of the incommensurability. And recently we verify numerically one of the two candidates, by using Sorensen-Affleck prescription. The obtained correlation function and Green function have no ultraviolet singularity, contrary to the non-linear sigma model. We will also plan to talk the relation with classical ANNNI spin models.