

- **The Clebsch-Gordan/Racah coefficients of $sl_{-1}(2)$ and orthogonal polynomials of the Bannai-Ito scheme**

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The $sl_{-1}(2)$ algebra is an associative algebra with four generators, including an involution ($R^2 = id$), satisfying both commutation and anticommutation relations. It occurs as the dynamical algebra of the parabosonic (or Dunkl) oscillator in 1 dimension. In this talk, I will show that the Clebsch-Gordan and Racah problems for this algebra can be solved by identifying the corresponding "hidden" algebra in each case. I will also show how these structures allow one to obtain the exact formulas for the CG and Racah coefficients in terms of orthogonal of the Bannai-Ito scheme.