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Rational SU(3) Gaudin Model

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Abstract: The Hamiltonians of the SU(3) Gaudin model are constructed based on the nonrelativistic limit of the SU(3) chain. After the quantum determinant being well defined, the eigenvectors and eigenvalues of the Hamiltonians of the SU(3) Gaudin model are given. These results can be generalized to any number of constituting spins (SU(N)).

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