The Le-Diagram for the Resonance of Modified KP Equation

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ABSTRACT

The Le-Diagram is a Young diagram filling with "+" or "O" in each box, which has the Le-property: there is no "O" which has "+" above it AND its left. In KP equation, we use the Le-Diagram to describe the resonance between line solitons. But in the Modified KP equation (MKP), the Le-diagram is different from KP equation due to kink-solitons. One will utilize the Le-diagram to describe the resonance structure between kink-solitons and line-solitons in the MKP equation.