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ONE EXAMPLE OF EXACTLY SOLVABLE QUANTUM MECHANICS PROBLEM OF POSITION DEPENDENT MASS

This communication has been dedicated to quantum dynamics of particle whose mass depends on coordinate. We considered one dimensional model which admits to obtain the exact solution of wave equation. The position dependent mass was represented as the periodic function. Inside of period the mass varies accordingly to the inverse proportionality. We have found wave functions in their explicit form as well as energy eiguen values. It has been shown that the energy spectrum manifests properties typical for periodic nanostructures.

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