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On the common zeros of Bessel functions

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Abstract

Using a functional analytic method we give some results concerning common zeros of the ordinary Bessel functions $J_{\nu}(z)$ of first kind, with respect to ν and fixed z. A lower bound for the common zero z of the Bessel functions $J_{\nu}(z)$, $J_{\mu}(z)$, where ν , μ are known, is also given.

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