

# PT- and CPT-Symmetric Operators. Critical Parameter Values. Spectral Portraits.

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The concept of PT- and CPT- symmetric operators appeared recently in physical literature. A typical example is an operator of the form

$$-\varepsilon d/dx^2 + u(x) + iv(x)$$

with Dirichlet boundary conditions at the interval  $(-1,1)$ , where  $u(x)$  and  $v(x)$  are real even and odd functions, respectively, and  $\varepsilon$  is (the so-called quasi-classical) parameter. We shall discuss the spectral properties of this operator family (and other ones).