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## Quasinormal modes in the field of a dyon-like dilatonic black hole

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Quasinormal modes of massless test scalar field in the background of gravitational field for a non-extremal dilatonic dyonic black hole are explored. The dyon-like black hole solution is considered in the gravitational  $4d$  model involving two scalar fields and two 2-forms. It is governed by two 2-dimensional dilatonic coupling vectors  $\vec{\lambda}_i$  obeying  $\vec{\lambda}_i(\vec{\lambda}_1 + \vec{\lambda}_2) > 0$ ,  $i = 1, 2$ . The first law of black hole thermodynamics is given and the Smarr relation is verified. Quasinormal modes for a massless scalar (test) field in the eikonal approximation are obtained and analysed. These modes depend upon a dimensionless parameter  $a$  ( $0 < a \leq 2$ ) which is a function of  $\vec{\lambda}_i$ . For limiting strong ( $a = +0$ ) and weak ( $a = 2$ ) coupling cases, they coincide with the well-known results for the Schwarzschild and Reissner-Nordström solutions. It is shown that the Hod conjecture, connecting the damping rate and the Hawking temperature, is satisfied for  $0 < a \leq 1$  and all allowed values of parameters.

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