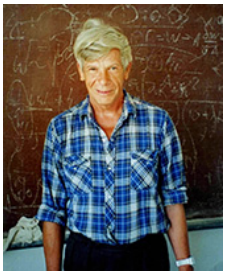

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Vaidya spacetimes by gravitational decoupling

There is a famous theorem that Black holes don't have hairs. It means what, a black hole has three charges, i.e. mass, angular momentum, and electric charge. However, Hawking showed that black hole can possess so could soft hair. Another method to evade no hair theorem is gravitational decoupling. Applying this method one can obtain hairy Schwarzschild, Reissner-Nordström, Kerr black holes. Only static stationary hairy black holes have been obtained by gravitational decoupling so far. In this work we apply this method to obtain dynamic solution describing the exterior geometry of black hole. We have obtained hairy Vaidya and generalized Vaidya black holes by gravitational decoupling.

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