"Firewall evasion by quantum gravity"

It has been argued that if black hole evaporation is a unitary quantum process, then a black hole horizon must be cloaked by a "firewall", i.e. a highly excited state of local quantum fields. This reasoning is based on factorizing the Hilbert space into interior and exterior degrees of freedom. Such factorization ignores the Wheeler-deWitt constraint equation, which arises from the diffeomorphism invariance of quantum gravity. I will argue that this constraint evades the firewall.

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