

Spontaneous black-hole scalarization in asymptotically safe quantum gravity

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UV

Asymptotically safe
quantum gravity



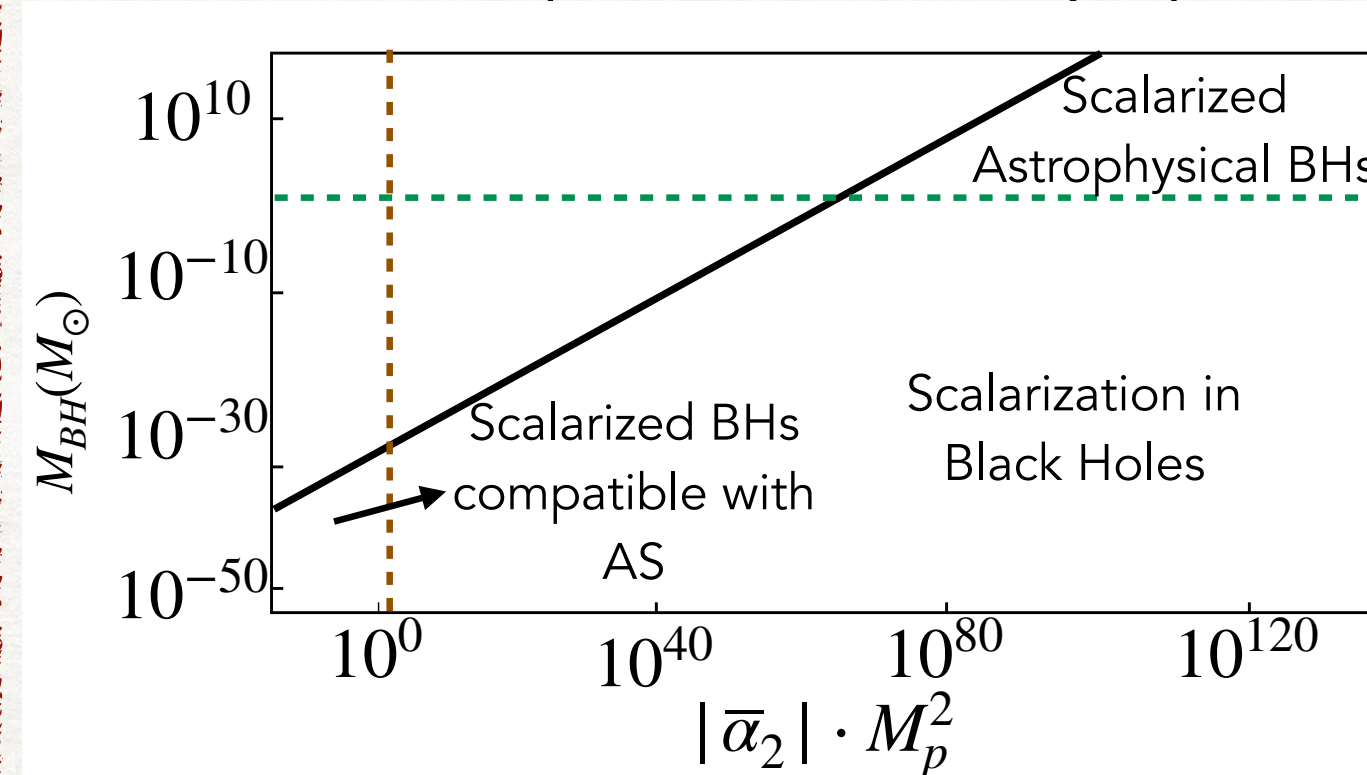
**Scalar Gauss -
Bonnet Gravity**



Phenomenological
interest

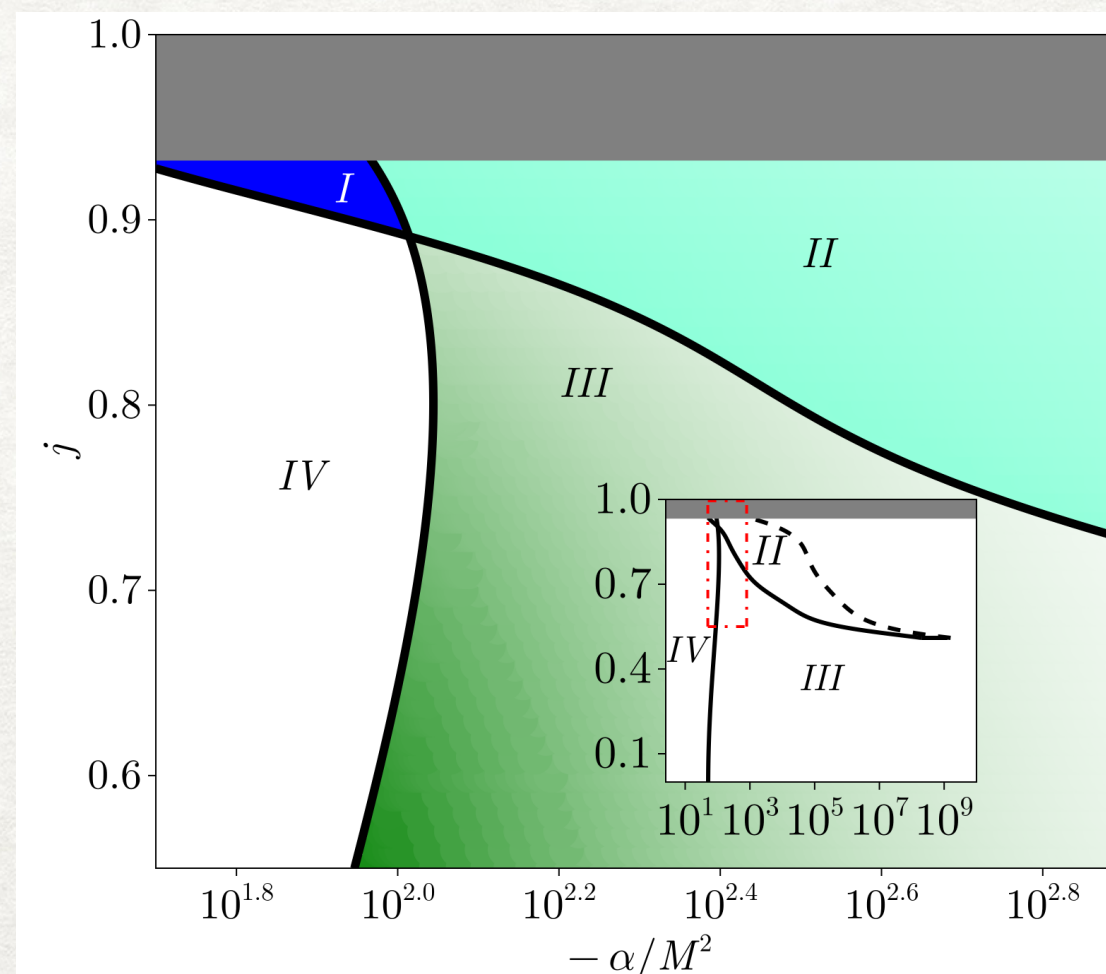
IR

Not compatible with asymptotic safety



[arXiv:26~]

Strong breaking of black hole uniqueness



[arXiv:2603.05064]

Example on how quantum gravity
theories can discriminate between
different modified gravity models

Together, they can reduce the
freedom in both directions!

Example on how phenomenology
can discriminate between different
quantum gravity theories