

## Contribution submission to the conference Gießen 2024

**Questionable predictions by EHT image of Sgr A\*; observational evidence for Sgr A\* being no BH; de Laval nozzle and its application to astrophysical jets.** — ●JÜRGEN BRANDES —  
Karlsbad, Germany

I. The famous EHT image of Sgr A\* predicts BH features in contradiction with observation:  $a^* = 0.9375$  against  $a^* \leq 0.15$ ; spin direction face-on against edge-on; accretion light variability arising with accretion disks against variability of accretion wind. And there is a theoretical shortcut by Broderick et al.: The missing UV bump agrees with degenerate supermassive objects being no BH [1], [2].  
II. Furthermore, [3] proves: If Sgr A\* is a BH then its spin must be  $a^* = 0.90$ . But [1] proves that the spin of Sgr A\*  $\leq 0.15$ . The purely logical conclusion: Sgr A\* cannot be a BH (contrary to [3], its spin would be too low). **These observations of Fragione, Loeb, Daly et al. together are an obvious experimental confirmation for Sgr A\* not being a BH** [1], [3].  
III. Jets of supermassive objects being no BH are quite natural explained by astronomical application of a de Laval nozzle [4]. Since this does not work for BHs it should lead to observable differences between BHs and no BH stellar objects.

[1] Talk-DPG-2023 [www.grt-li.de](http://www.grt-li.de).

[2] J. Brandes, J. Czerniawski, L. Neidhart: *Special and general relativity...* VRI: 2023

[3] R. A. Daly et al., MNRAS 2024, 428 - 436

[4] P. Subramanian, *Fluid Dynamics for Astrophysics*, 2021, lec. 31

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