

# Schwarzschild solution

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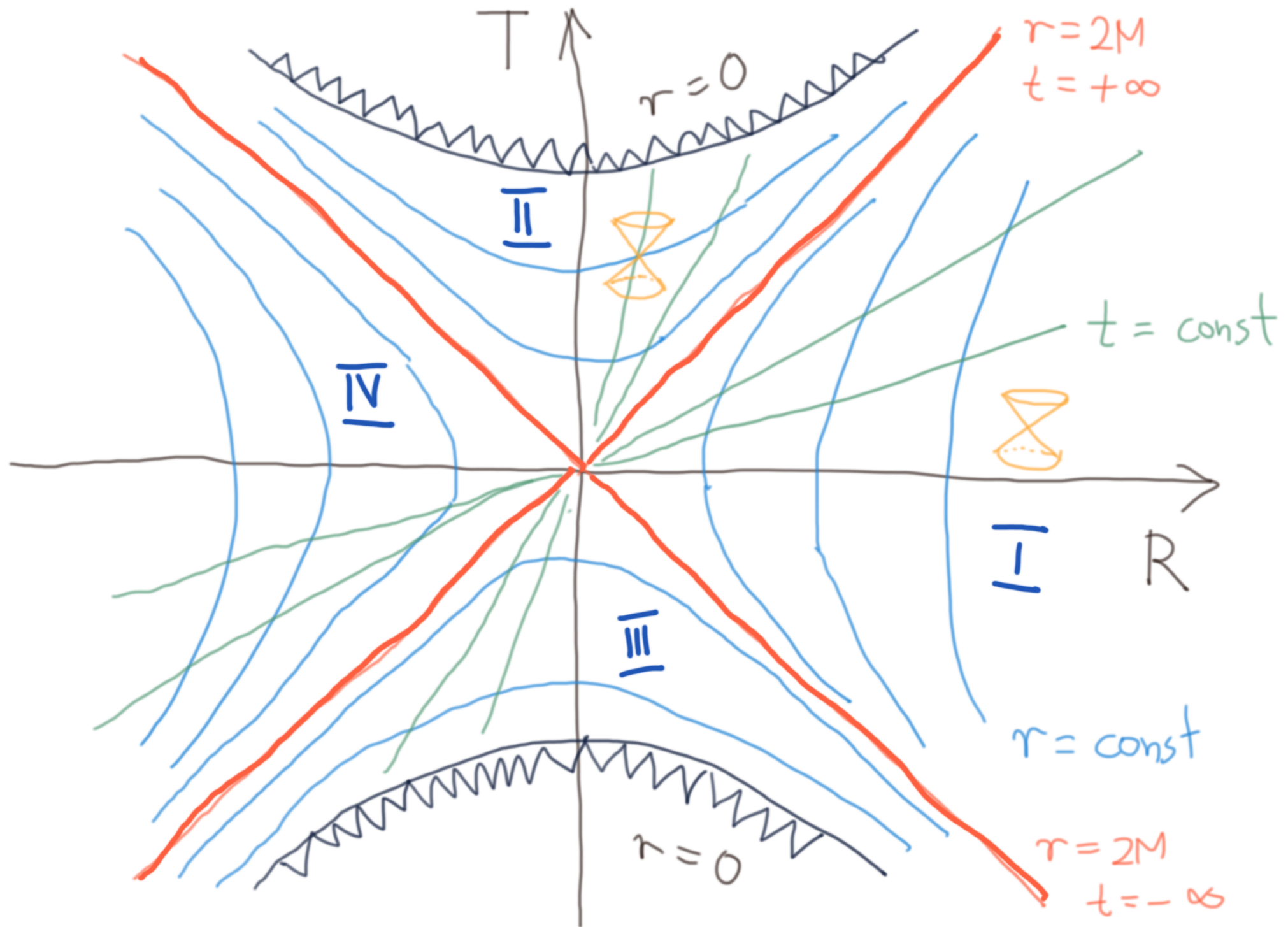
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### S2 star in Sgr A\*

$$\Omega_{\text{GR}} \approx 12' \cdot (16 \text{ yr})^{-1}$$

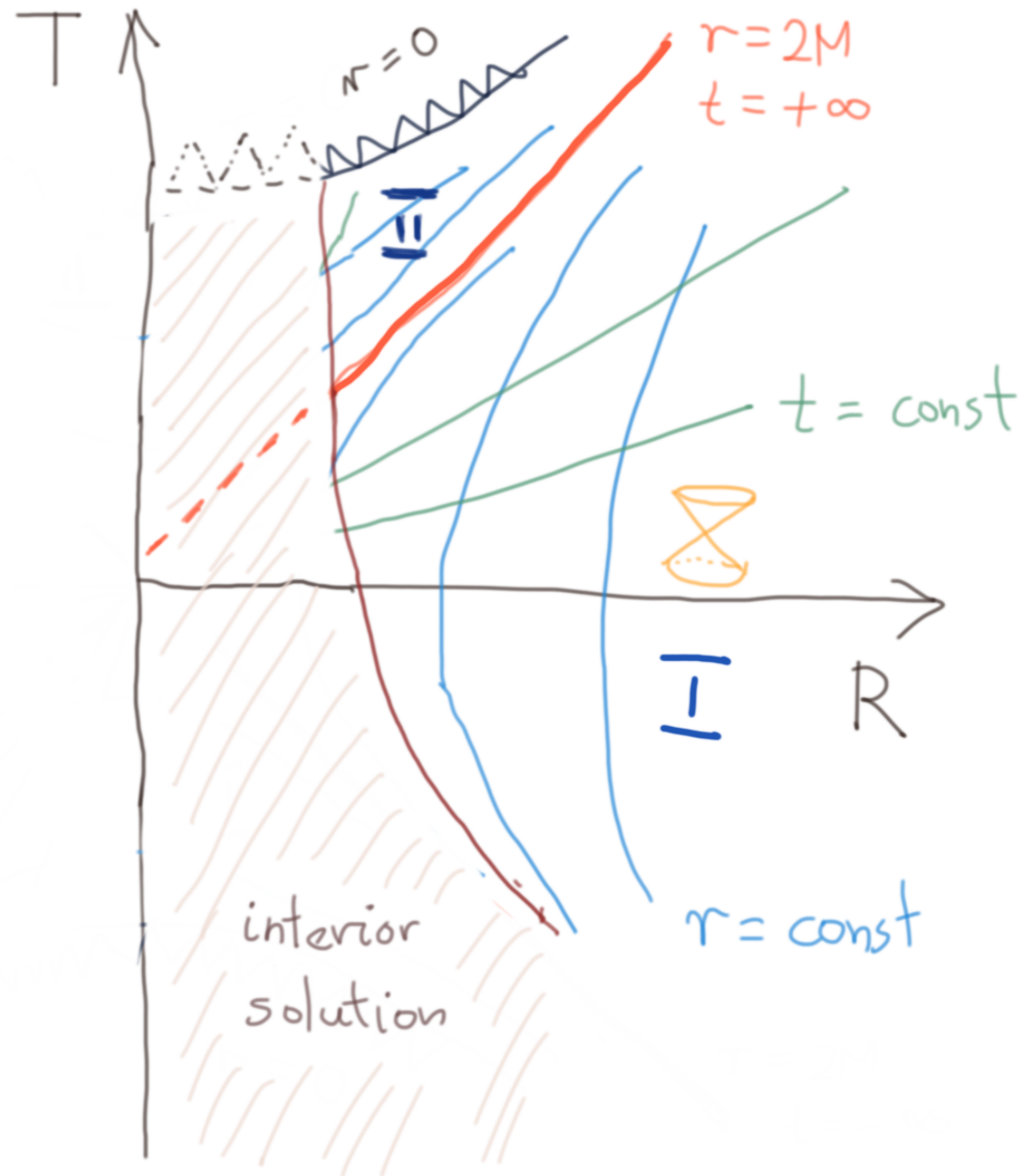
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## Schwarzschild in Kruskal-Szekeres coordinates



# Schwarzschild solution

## Schwarzschild + interior solution in Kruskal-Szekeres coordinates





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**Black holes**

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Non-rotating BH described by the Schwarzschild solution, rotating BH by the Kerr solution

# Introduction to general relativity

Mikołaj Korzyński (CFT PAN)

Winter semester 2023/24

Tuesdays, 9am-11am

**This is the end of the course**