

Astrophysics of gravitational wave sources

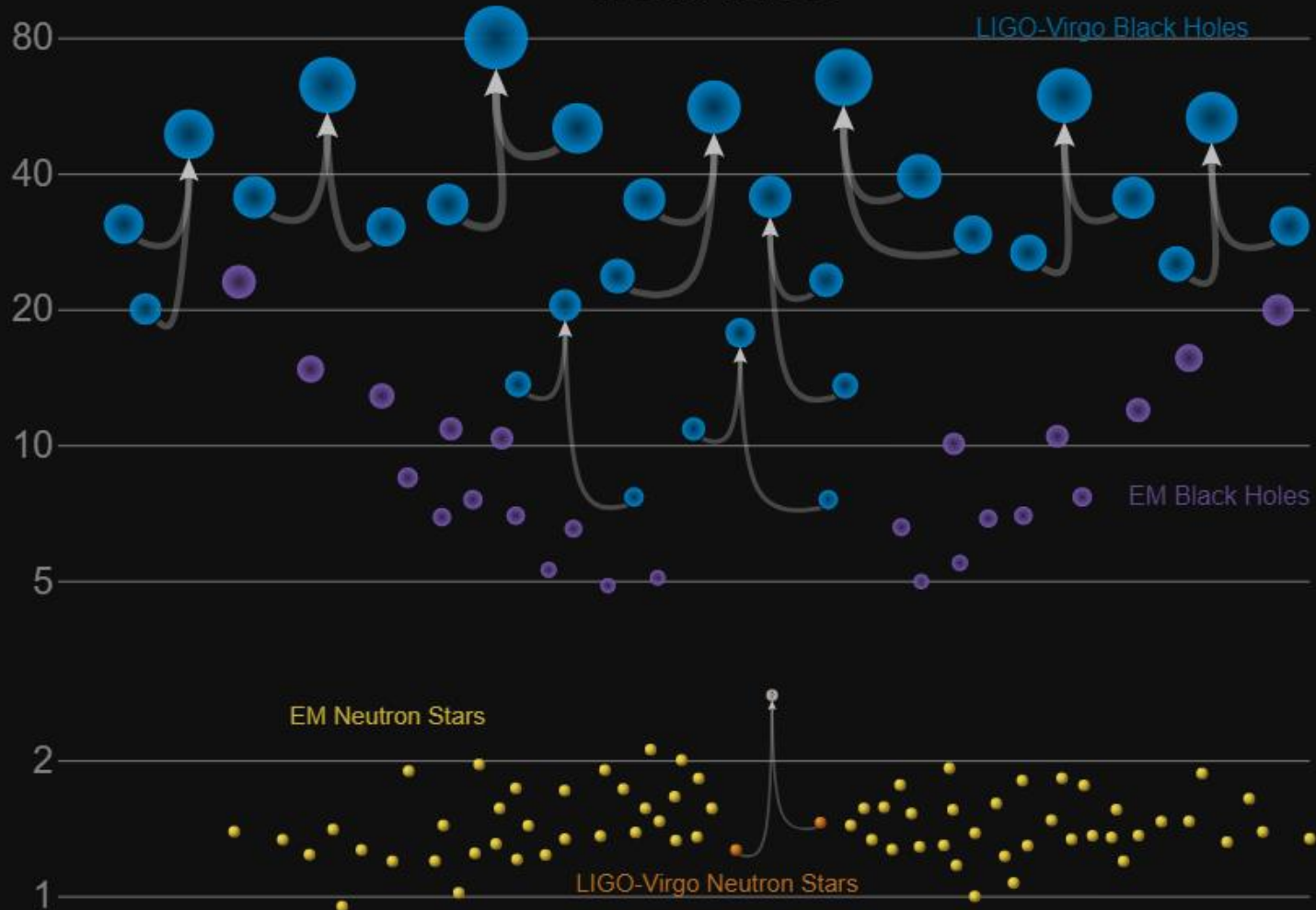
Lecture 2: Orbital decay due to gravitational wave emission

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Masses in the Stellar Graveyard

in Solar Masses



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LIGO-Virgo | Frank Elavsky | Northwestern

How do we approach complex, unsolved problems?

Orbital decay timescale due to
gravitational wave emission

Gravitational wave strain

$$h_{ij}(t) = \frac{2G}{c^4 r} \ddot{I}_{ij}^{TT}(t - r/c)$$

Virial theorem