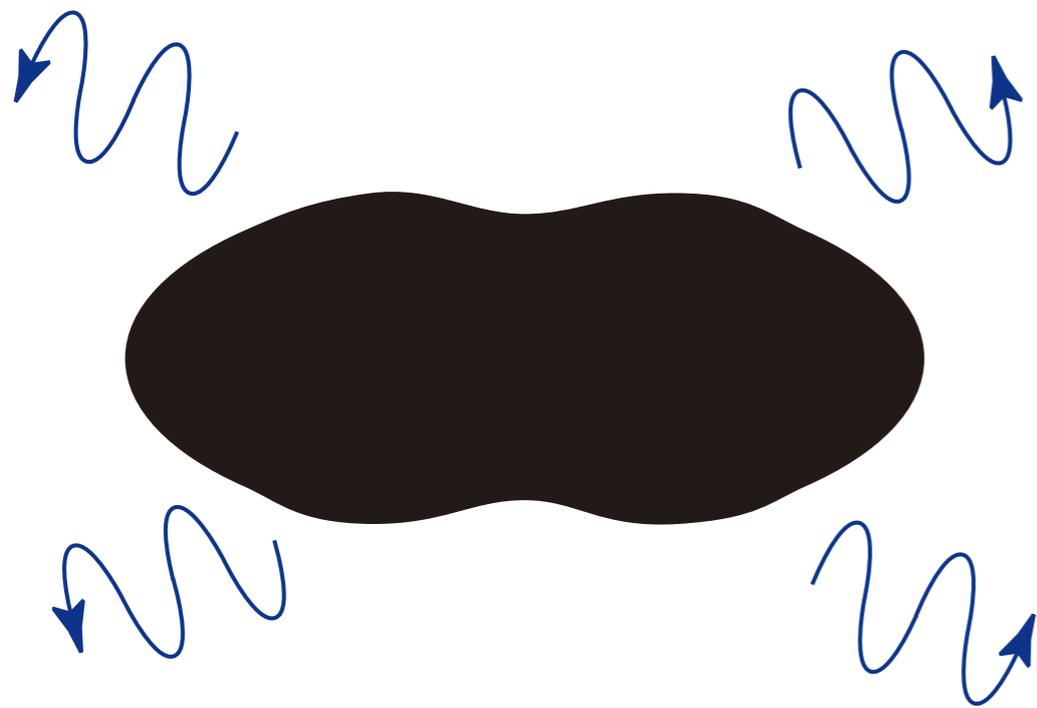


Rapidly Rotating Dynamic Black Holes through Gravitational Collapse

No. 58

Motoyuki Saijo (Rikkyo University)

Dynamic Black Holes



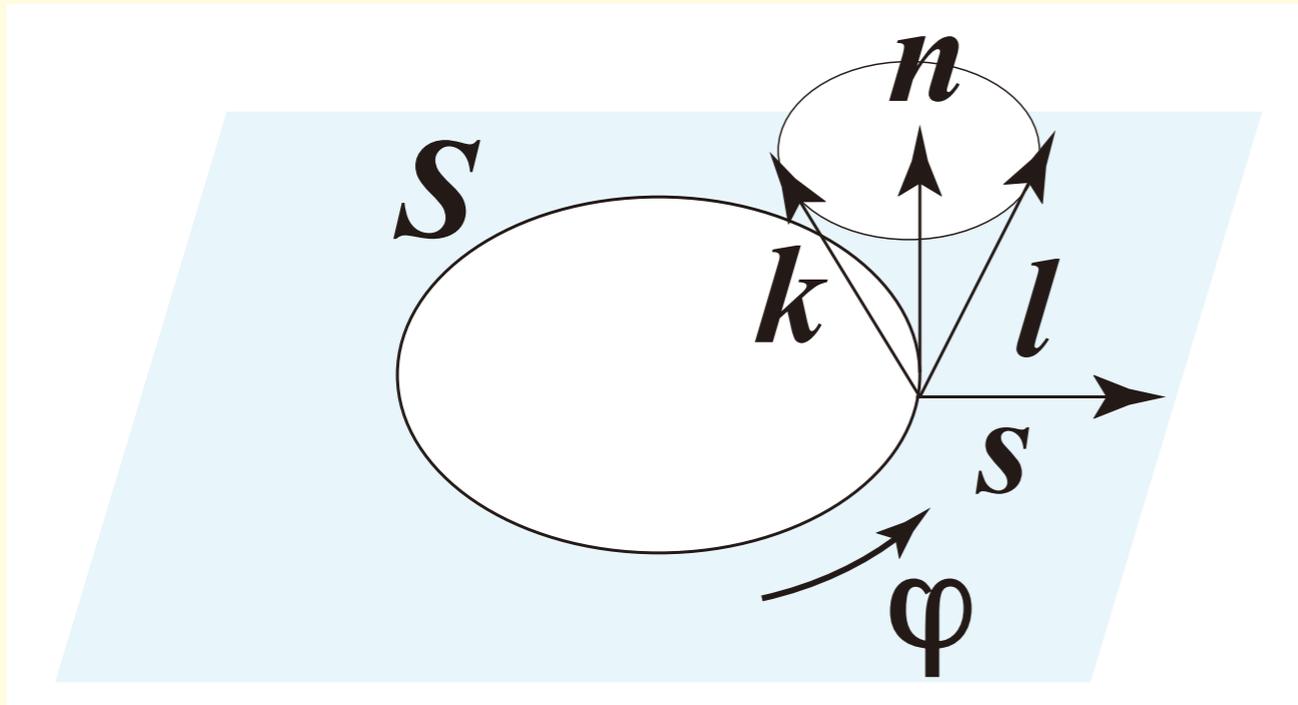
- Merger of Compact Objects
- Gravitational Collapse

Rapid Rotation

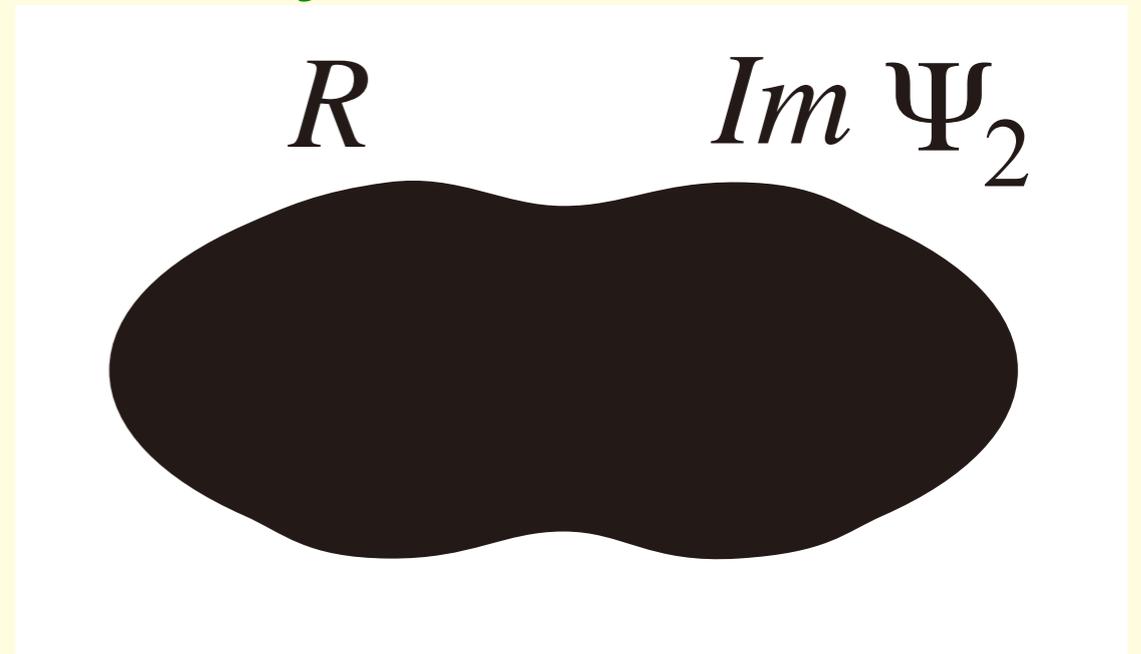
$$a \approx 0.95M$$

Extract Local Properties

1. Approximate Killing Vector



2. Configuration of the Dynamical Horizon



Discussion

- Nature of Dynamic Black Holes
(Deviation from Kerr?)
- Diagnosing Dynamic Black Holes
(Identifying the source of quasi-periodic waves)