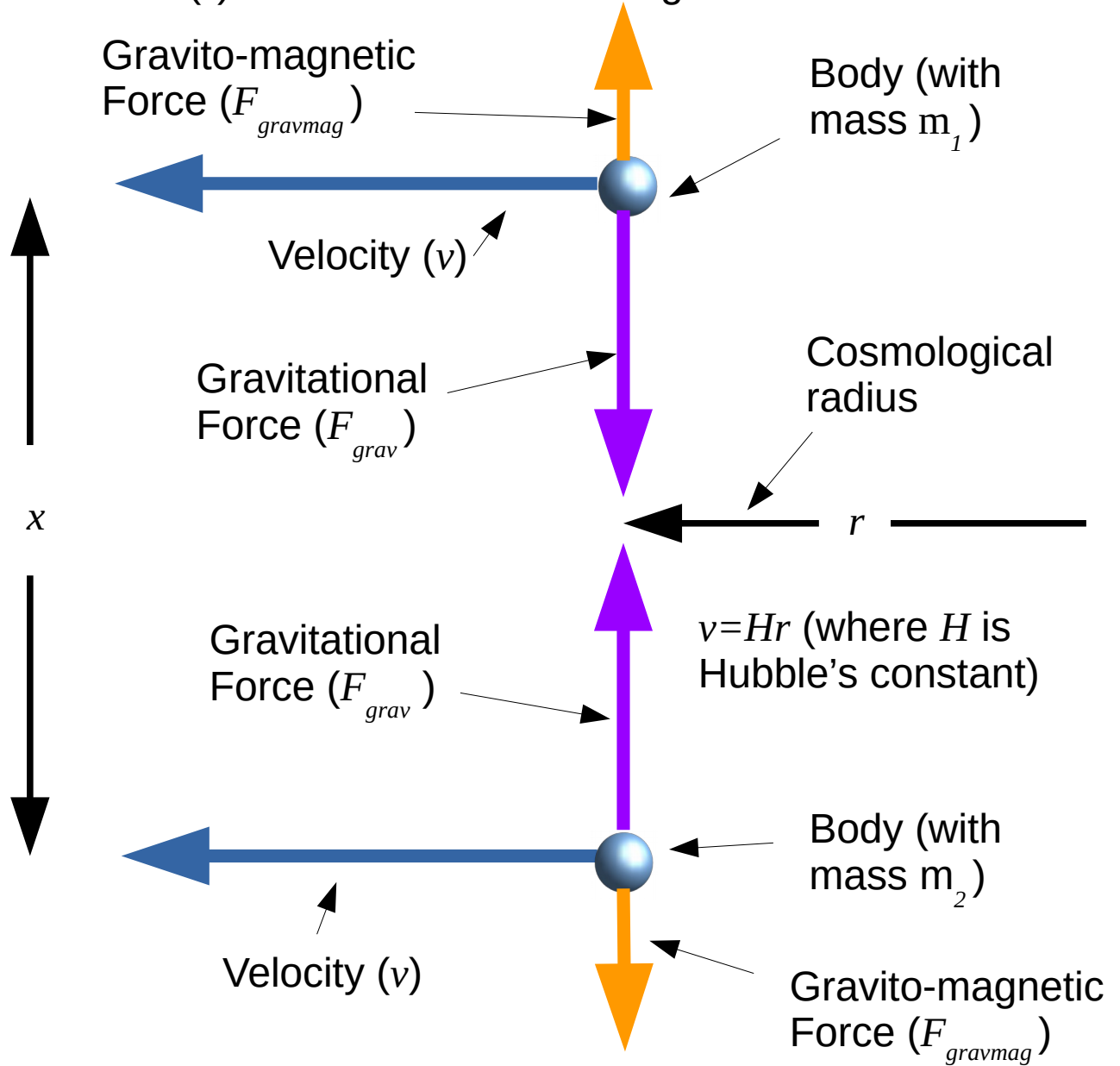


## Figure 5. Gravitational and gravito-magnetic forces between two massive bodies

Gravitational and gravito-magnetic forces on two masses a distance ( $x$ ) apart both moving with a velocity ( $v$ ) and at a distance ( $r$ ) from a central comoving observer.



$$F_{grav} - F_{gravmag} = \frac{\left(1 - \frac{v^2}{c^2}\right)^{\frac{1}{2}} m_1 \left(1 - \frac{v^2}{c^2}\right)^{\frac{1}{2}} m_2}{4 \pi \epsilon x^2}$$

As the velocity ( $v$ ) approaches the speed of light ( $c$ ), the resultant force on each mass ( $F_{grav} - F_{gravmag}$ ) approaches zero.