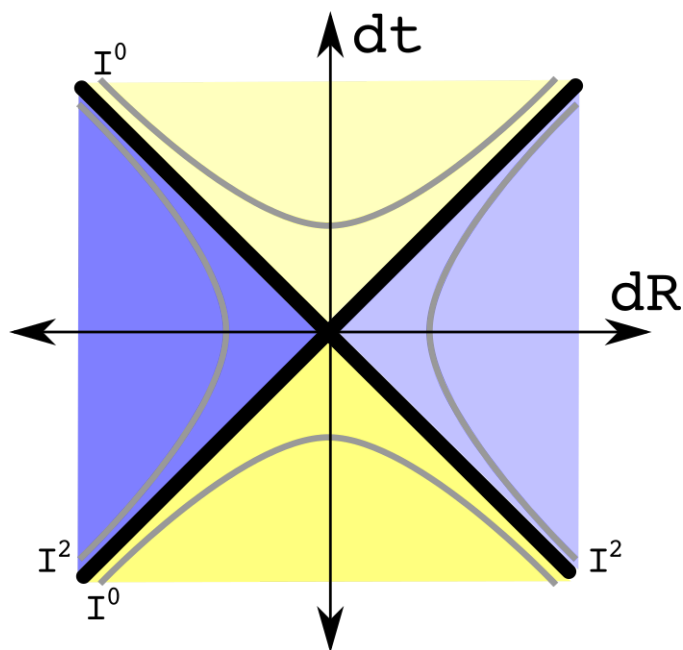
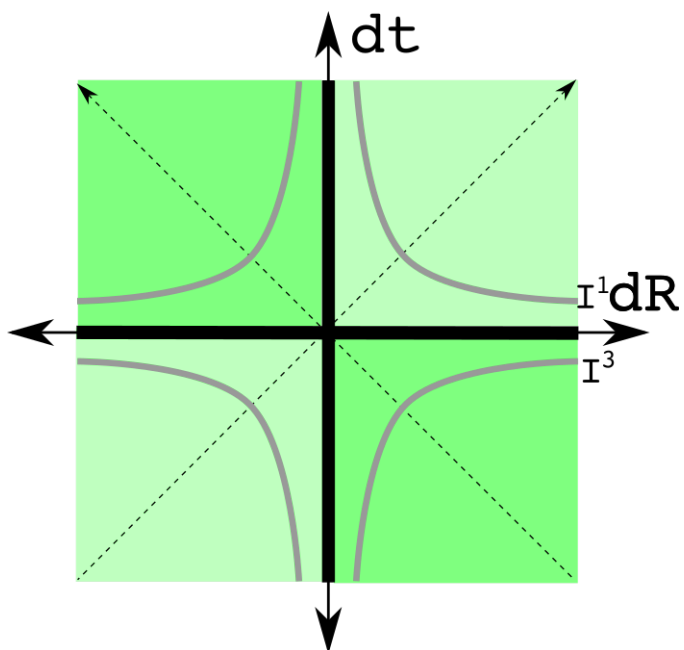


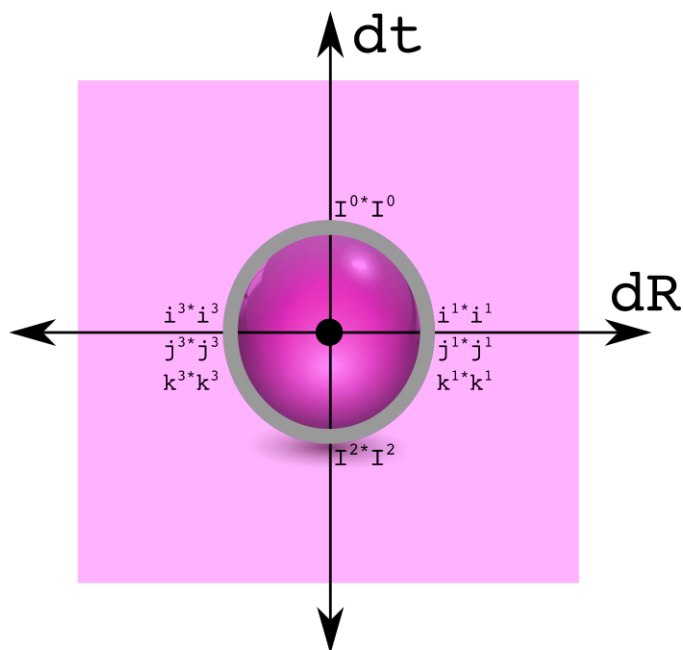
Classical



Fast Physics



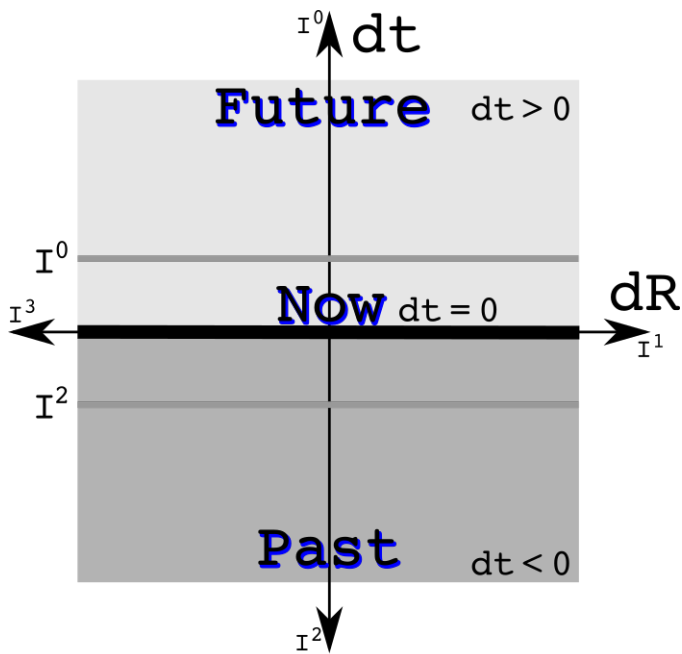
Gravity



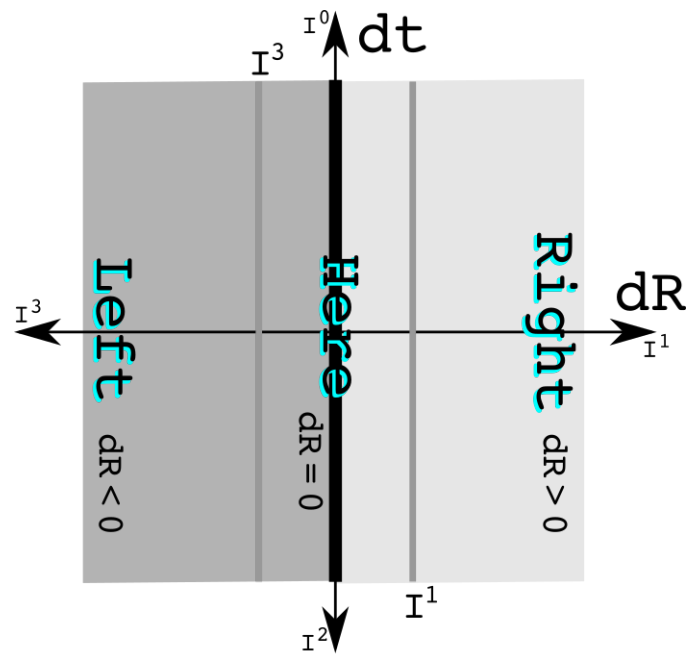
Light +

Space-time Geometries

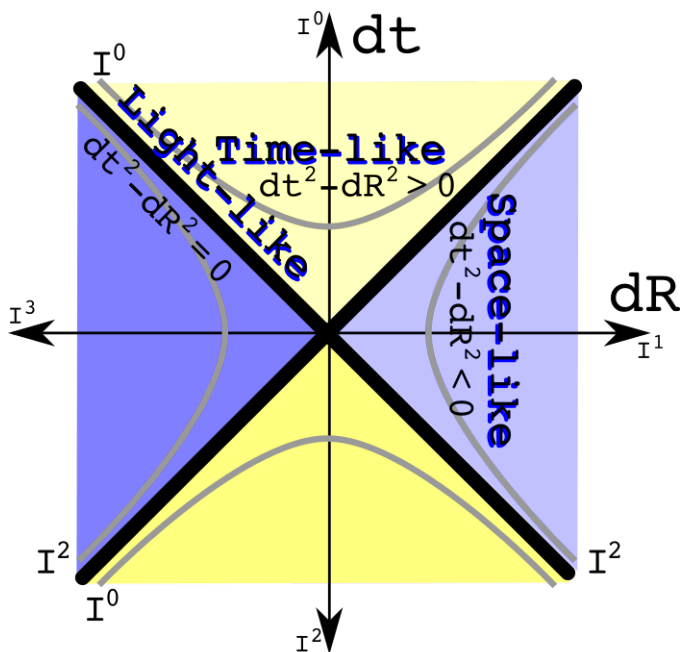
Space-Time Equivalence Classes



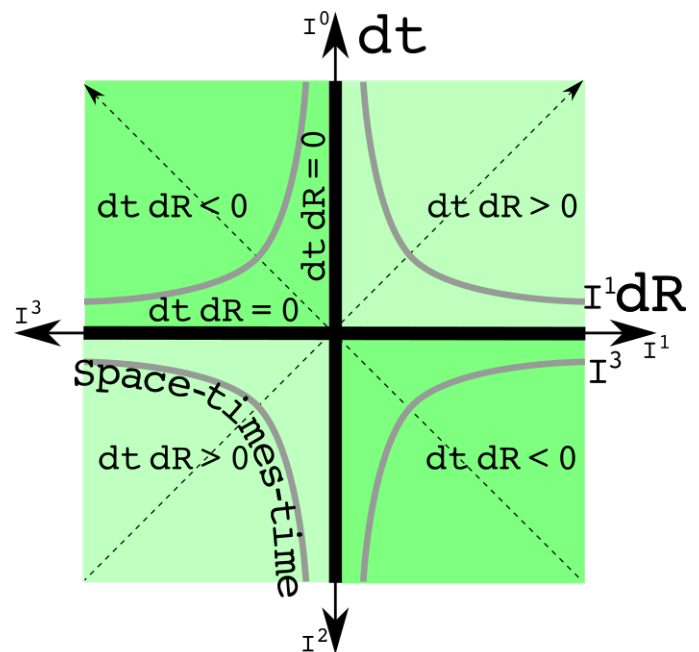
Time
 dt



Space
 dR

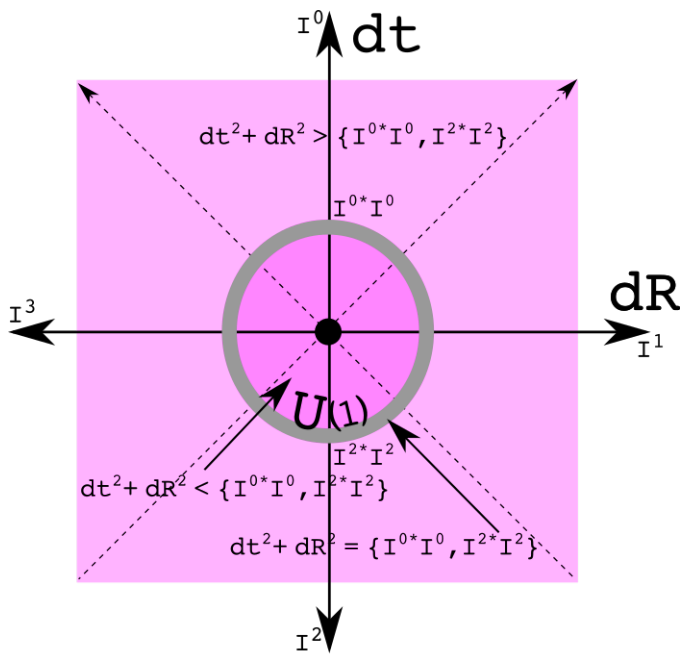


Causality
 $dt^2 - dR^2$

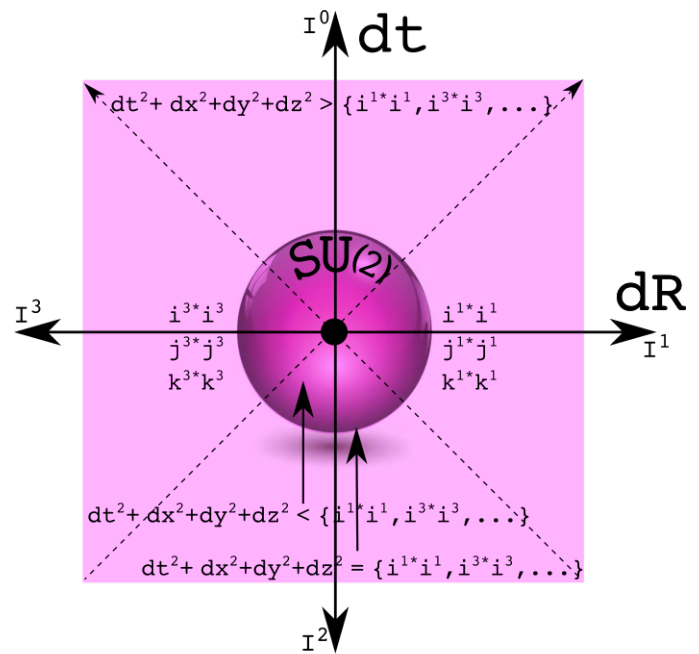


Gravity
 $dt dR$

Space-Time Equivalence Classes

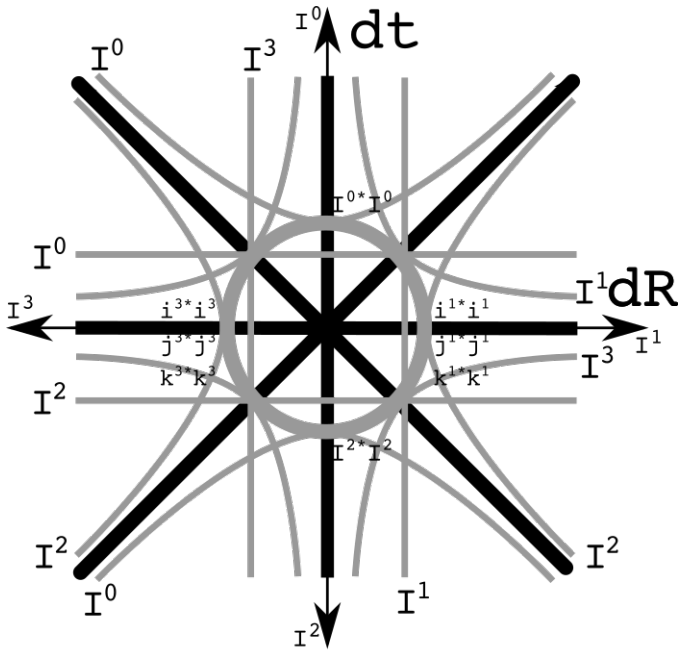


Light $U(1)$
 $dt^2 + dR^2$

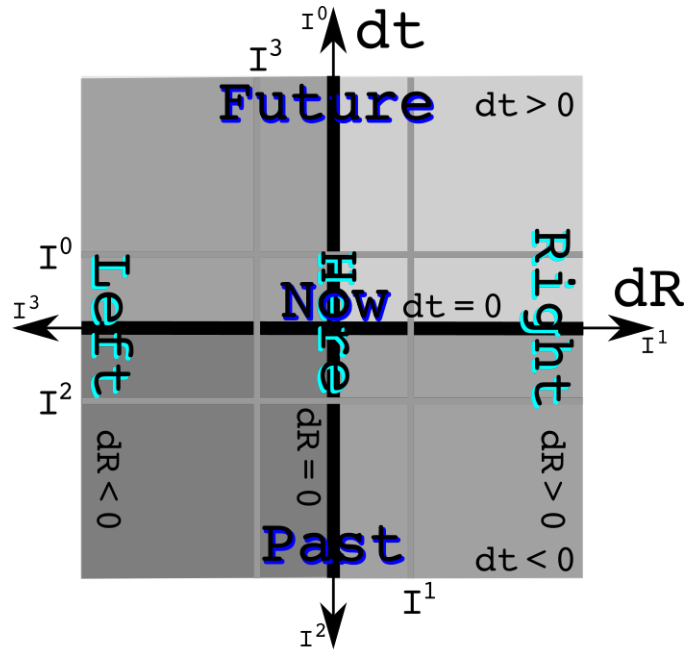
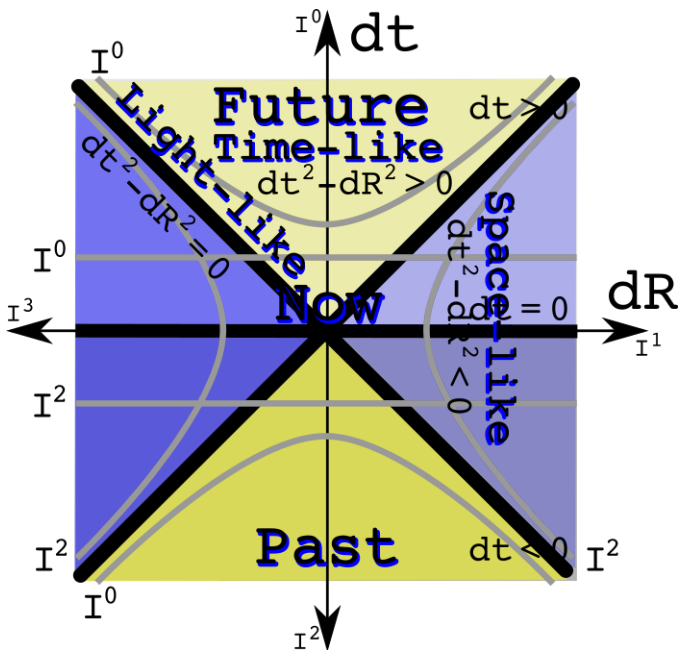


Weak Force $SU(2)$
 $dt^2 + dx^2 + dy^2 + dz^2$

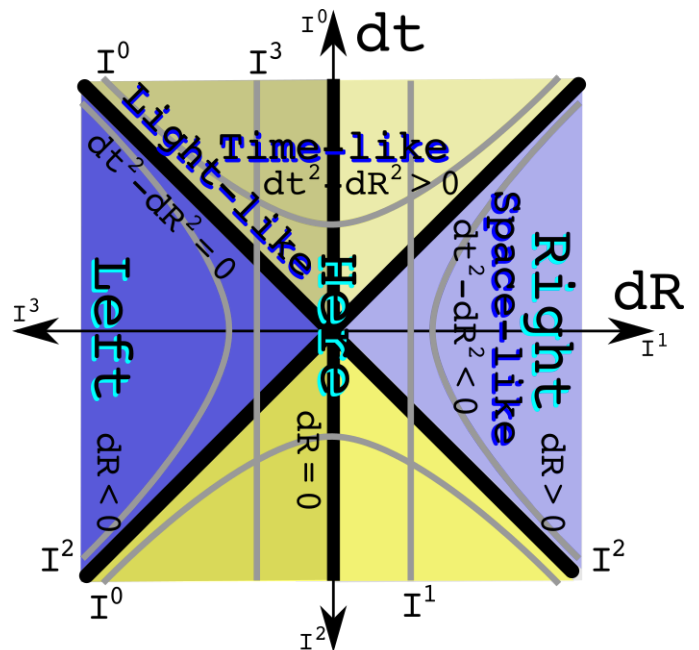
Overlapping Equivalence Classes



All
0's and 1's

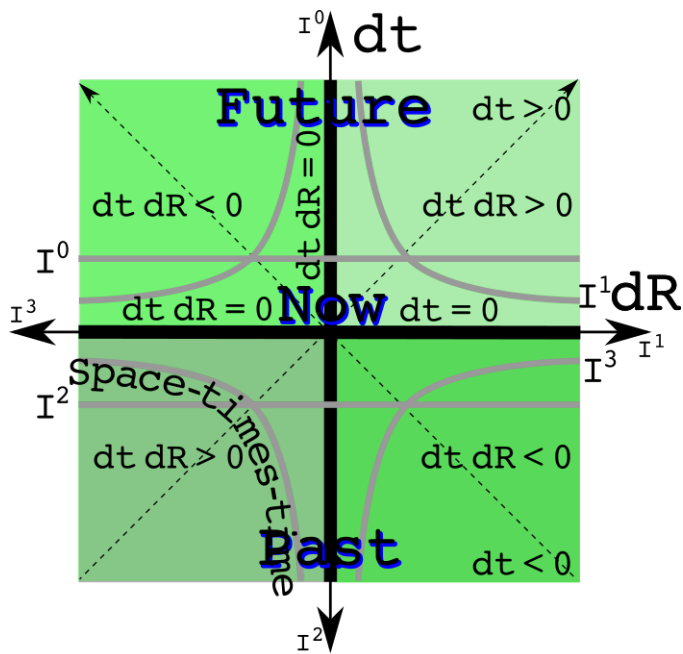

$$\frac{\text{Space}}{dR} + \frac{\text{Time}}{dt}$$


Two-tone Space-like

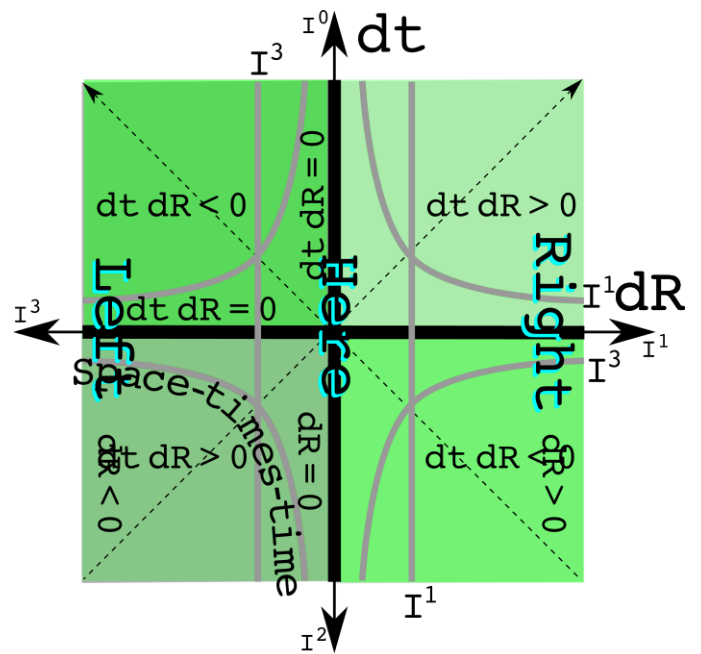


Two-tone Time-like

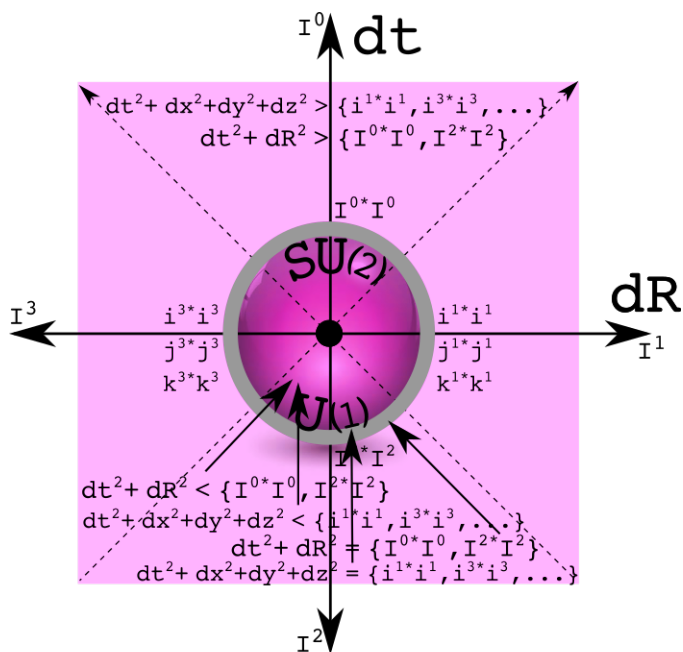
Overlapping Equivalence Classes



Gravity
monotone

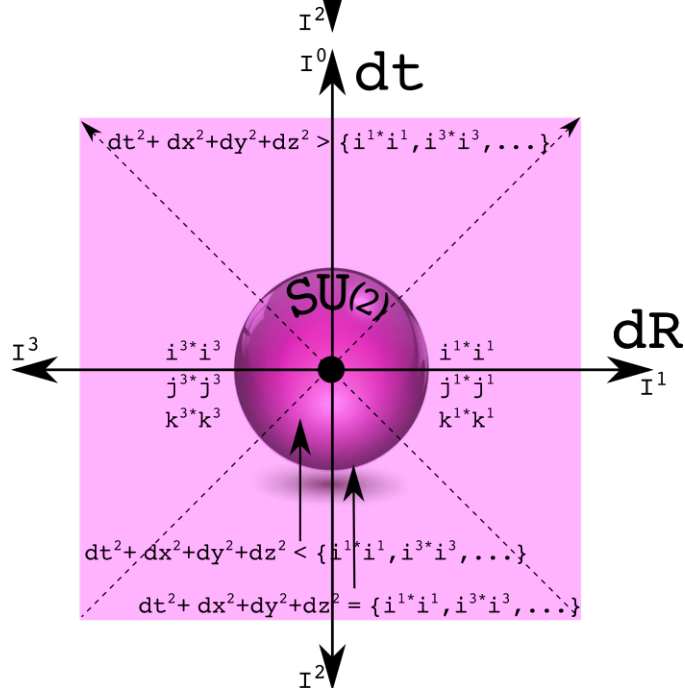
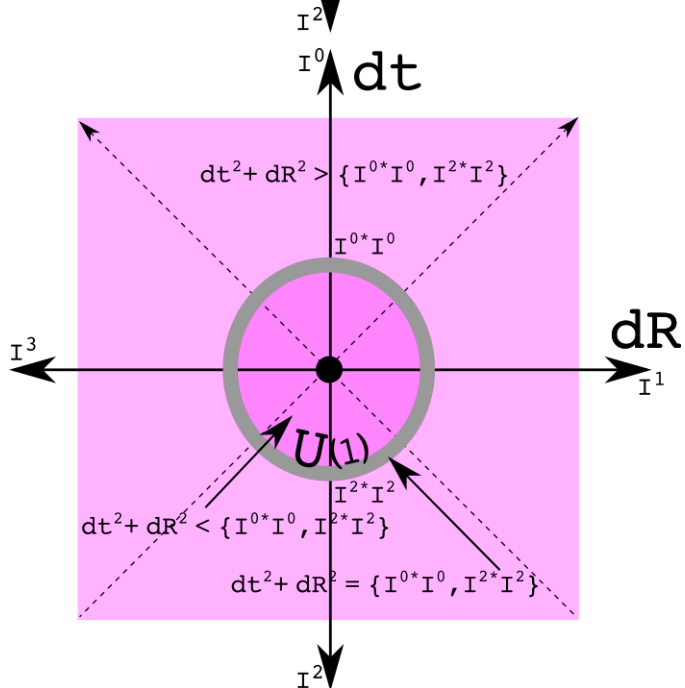
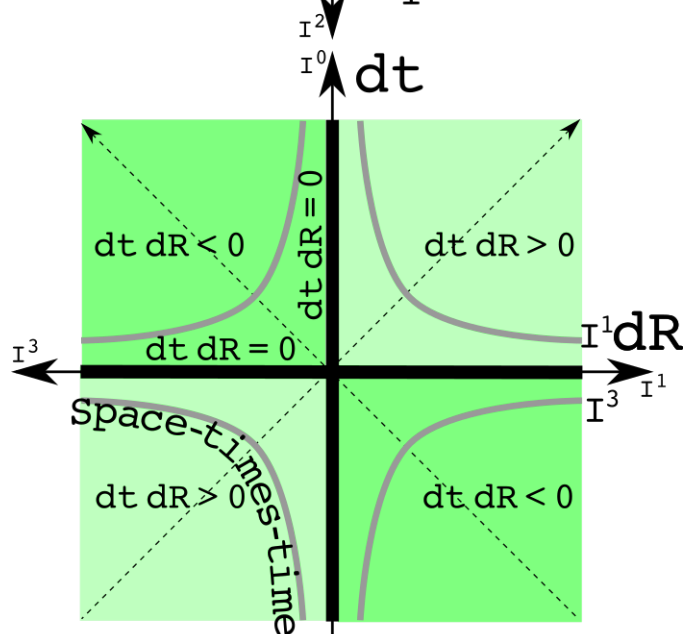
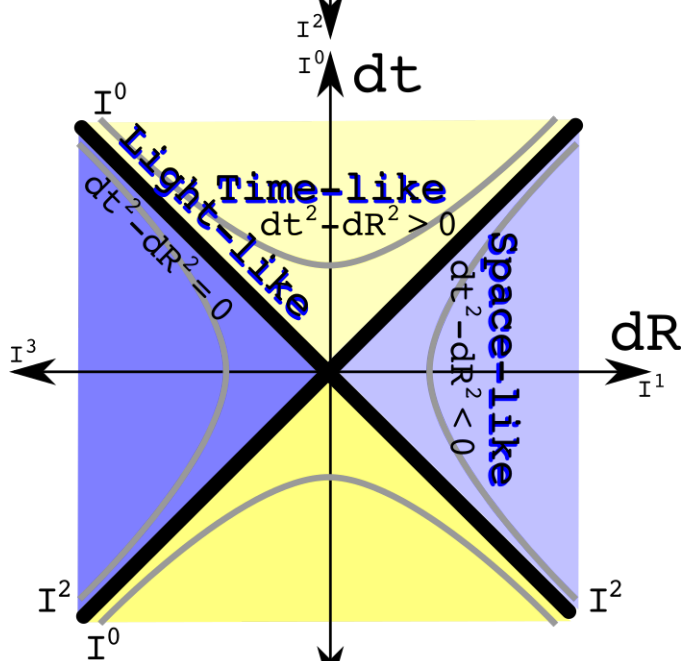
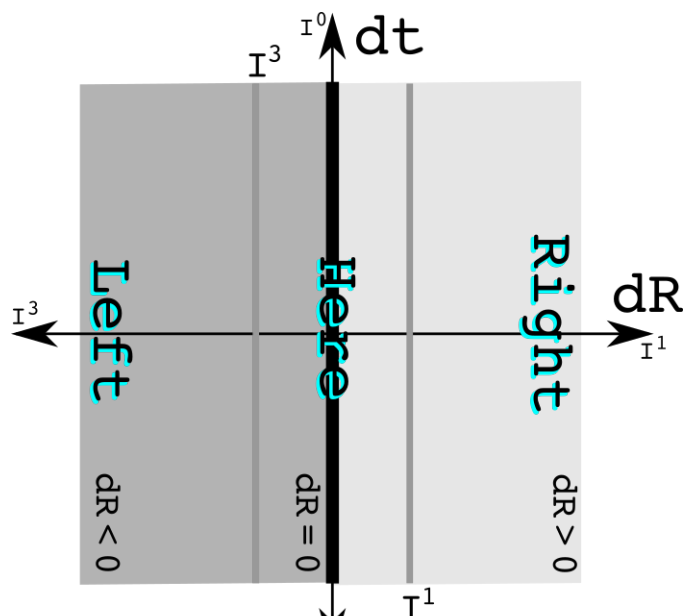
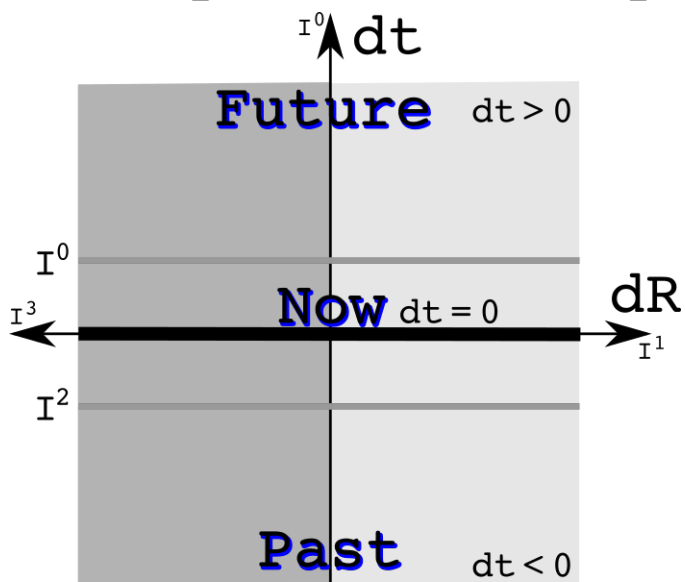


Gravity
monotone



Electro-weak
 $dt^2 + (dx^2 + dy^2 + dz^2)$

Space-Time Equivalence Classes



Overlapping Equivalence Classes

