

Parameterization:

Curves in space can be parameterized using intermediate variables such as t which can be thought of as **time**. When $\mathbf{r}(t) = (x(t), y(t), z(t))$ the head of the vector traces out the path of the curve as a function of t over some time interval I . All differential rules hold true when a curve is parameterized.

Introducing \mathbf{r} as position and t as time allows for e pan