

ABSTRACT 2023 MAA MathFest Tampa. (165w)

### Galileo and the squaring of time

Presuppose Galileo and Descartes collaborated on The Art of Falling. Let's get these two guys together. 15th Century Algebra and beginning Parametric Geometry Analysis. Galileo proffered unit time as range, making unit space as domain arbitrary. Galileo and Descartes, realizing domain fall space, not of fixed meter, needed accommodate changing displacement per units of range (time) presented a challenge. Their solution was to construct algebraic tiles to build an explanatory Euclidean Uniform Acceleration SpaceTime Frame. SpaceTime tiles, in a Descartes 1st Quad happening, would possess space as Central Force domain and range as time. I will use the interrupters placed on his incline plane as event time, each interruption a 1s range event. We only need two seconds of roll to find all the data we need to construct their 1st second Euclidean SpaceTime free fall tile for our Earth.

Galileo;            02/15/1564    01/08/1642

Descartes:        03/31/1596;    02/11/1560

*A Sand Box Geometry Philosophical Exploratory*

ALEXANDER      03/14/1944