

Workshop:  
**Exponential Motion!**

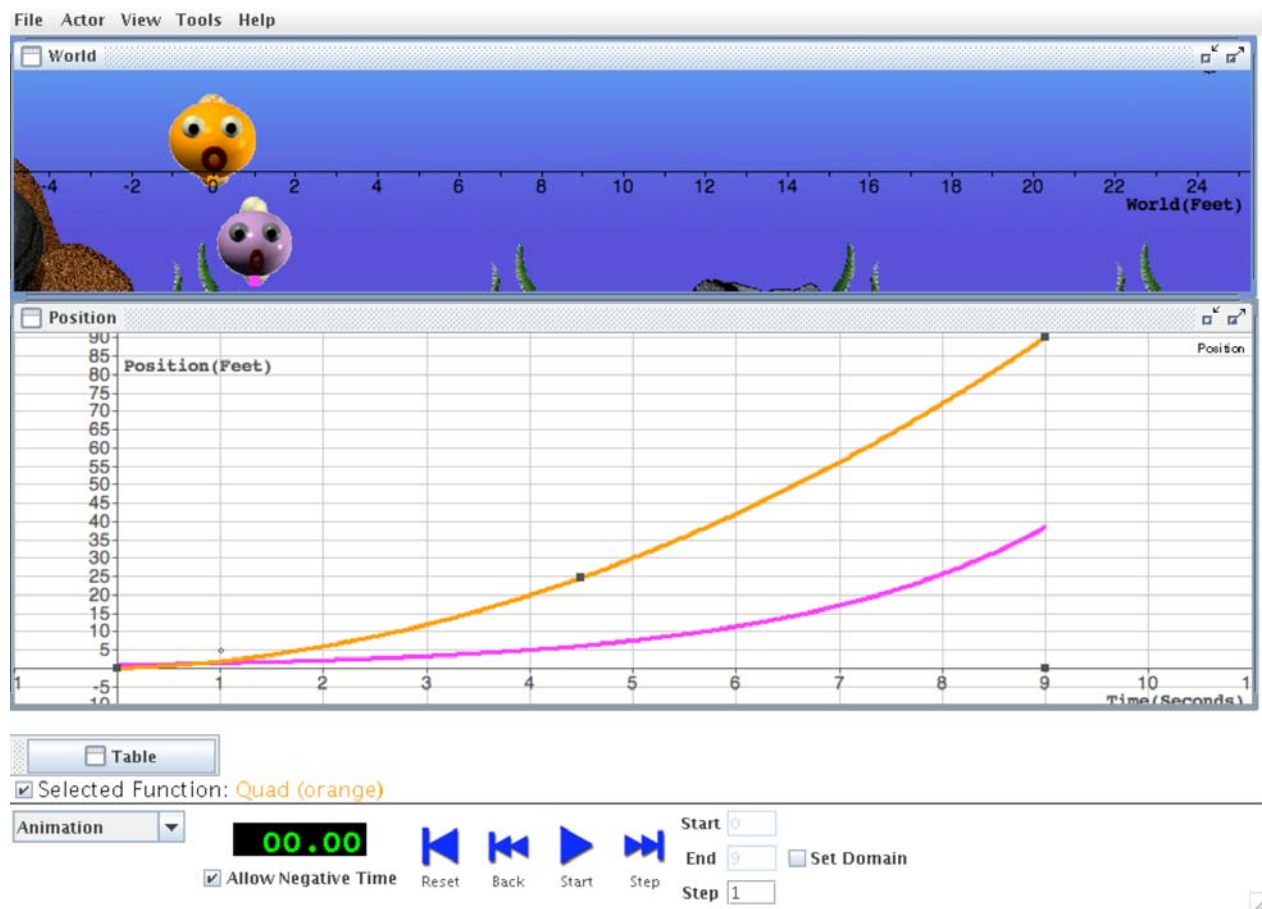
Presenters:

Derek Beaton, James Burke, *University of Massachusetts, Dartmouth*

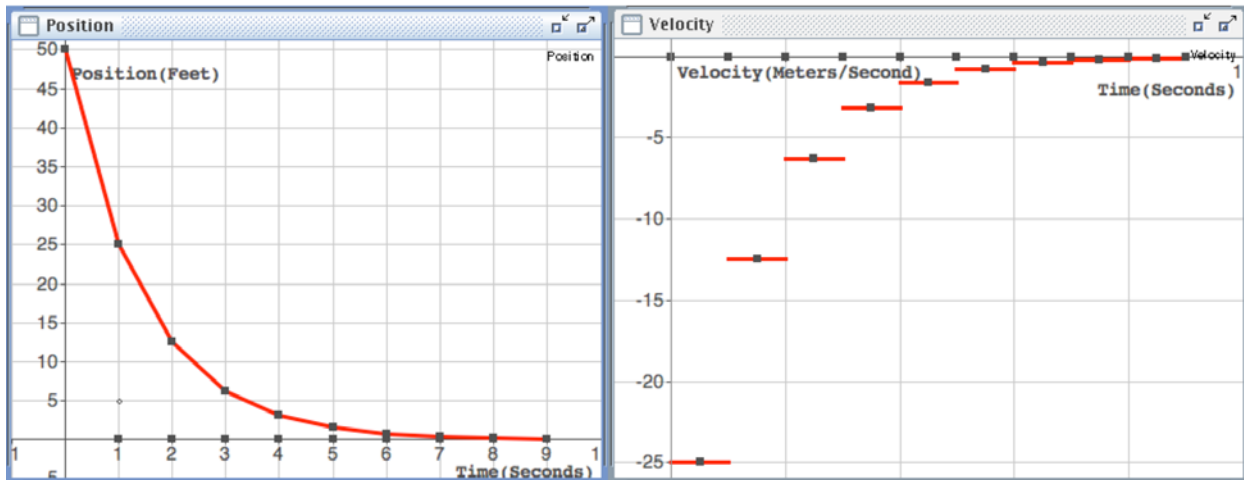
Date: Saturday, 24<sup>th</sup> March 2007, 12.00pm-1.30pm, Convention Center – B409

*Abstract:* Explore animations of actors whose motions are defined by exponential functions. How far do they travel each second? How does this relate to how fast they go? And understanding  $A$  and  $B$  in  $y = A \cdot e^{Bx}$  using SimCalc MathWorlds™.

1. Qualitative Discussions of Exponential Change – 10 min.
2. Qualitative Discussions of Phenomena – 5 min.
3. Introduction to Software – 5 min
4. **Demonstration and Participant Activity – 30 min.**



5. Making Exponentials About *Something*. – 5 min.
6. Understanding  $A$  and  $B$  – 5 min.
7. Connecting  $A$  to  $mx+b$  – 5 min.
8. Understanding the properties of Exponential functions – 5 min.
9. **Let's talk Paradox, the Activity** – 10 min.



10. Conclusions and closing discussions – 10 min.