

# Disciplined Inconsistency



Safely trading correctness for performance in distributed systems

Brandon Holt, James Bornholt, Irene Zhang, Dan Ports,  
Mark Oskin, Luis Ceze

*conversation order should be correct*

Luis Ceze @luisceze  
Please spread the word and participate on the 3rd Workshop on Approximate Computing - WAX2016 w/ ASPLOS'16!  
[approximate.computer/wax2016/cfp/](http://approximate.computer/wax2016/cfp/)

1/6/16

Ellen DeGeneres @TheEllenShow  
If only Bradley's arm was longer.  
Best photo ever. #oscars

ellen

3.4M 2M

3.4M

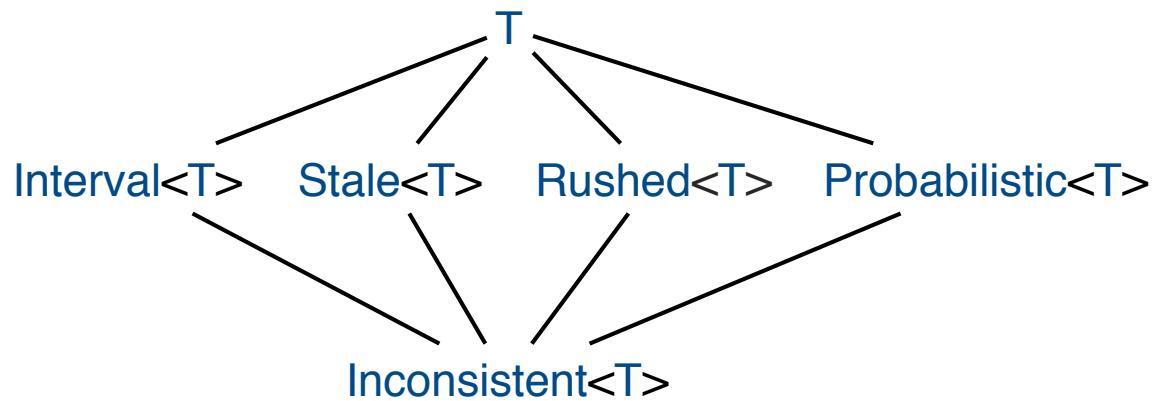
*this retweet count doesn't need to be precise*

# Inconsistent Probabilistic Approximate

} Types



`retweets("EllenSelfie")  
.size<latency:100ms>()`



Type systems to **communicate error bounds or tolerance**,  
programmers **trade off performance for correctness**.