



# Disciplined Inconsistency

Managing disorder in weakly consistent distributed systems.

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*Lightning Talk at WAX 2015*

# Disciplined Inconsistency

Distributed systems can't afford to be **consistent** (just **eventually**).

**Brandon Holt** @holtbg  
Disciplined inconsistency: ⚡ talk at #WAX2015.  
Thanks for presenting, @siderealed.

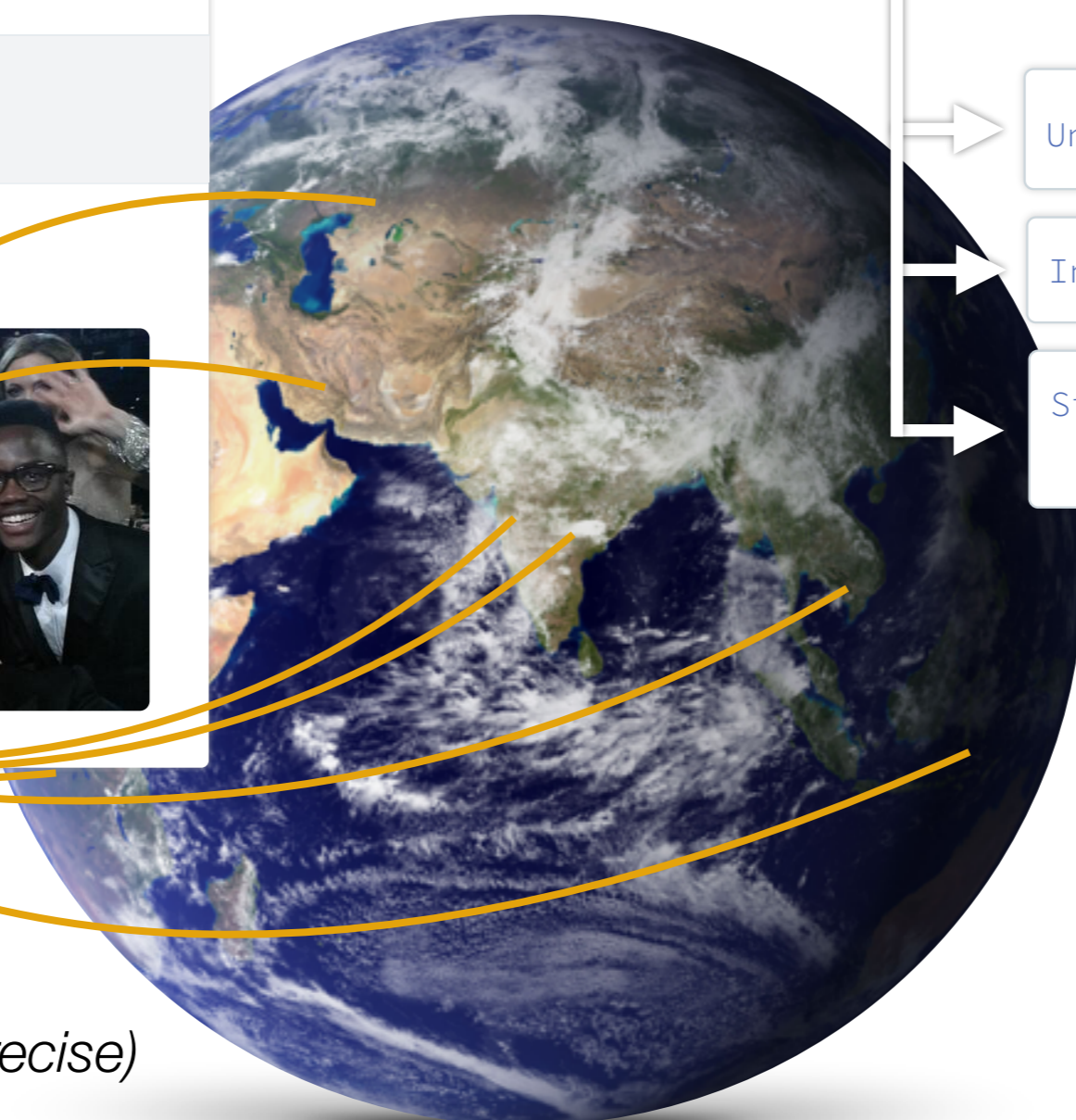
**James Bornholt** @siderealed  
@holtbg no prob. born to serve...

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

3.4M 2M

 **3.4M**

*(doesn't need to be precise)*



```
Set("retweeters:1003").size<approx>()
```

```
Uncertain<int>{  }
```

```
Interval<int>{ 3395442 ± 10000 }
```

```
Stale<int>{ value: 3395442,  
            at: 19:31:03.479 }
```

But type systems can **communicate error bounds or tolerance**, allowing programmers to **trade off consistency for correctness**.