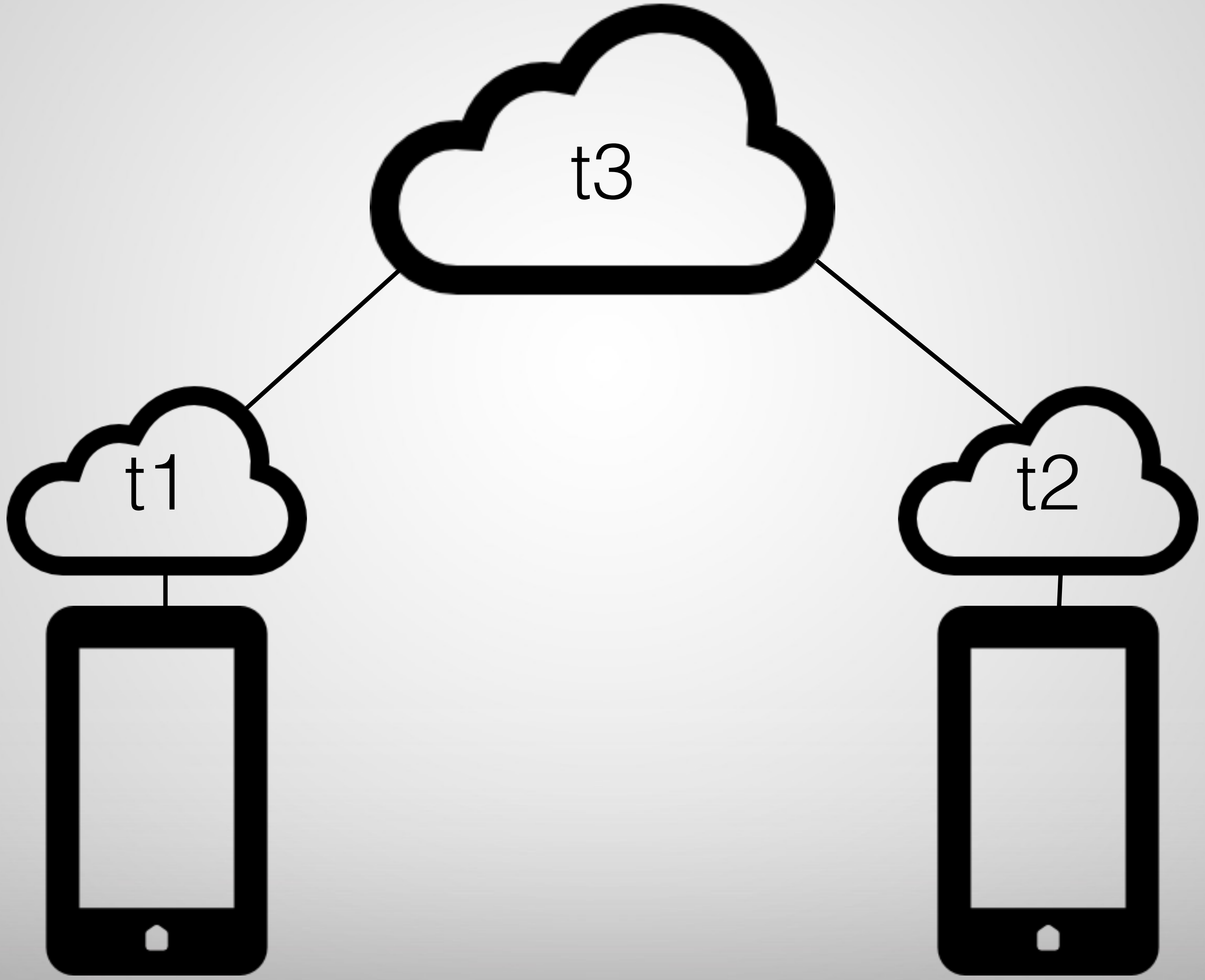
Tuple-based Coordination in AT

Model



Tuple?

[x,y,z] + propagation

match([?x,?y,?z],[1,2,3]) = {(x,1),(y,2),(z,3)}

Tuples API

```
import /.at.lang.totam
```

```
def mySpace := makeTupleSpace()
```

```
def tup := tuple: [“aMessage”,5]
```

```
def tupTemp := tuple: [“aMessage”,var: `num]
```

```
mySpace.out(tup)
```

```
mySpace.inject(tup)
```

Tuples API

```
def aTuple := mySpace.rdp(tupTemp);
```

```
def allTuples := mySpace.rdg(tupTemp);
```

```
def tupNum :=aTuple.getField(2)
```

Tuples API

```
mySpace.goOnline()
```

```
mySpace.whenever: tupTemp read: {
system.println(“Got: “ + num)}
```

```
mySpace.whenever: tupTemp in: {
system.println(“Got: “ + num)}
```

Tuples API (propagation)

See Elisa’s slides 😉

Symbiosis “handshake”

```
public interface JSide {
public void foo()}
```

```
public interface ATSide {
public void bar()}
```

```
public class JGUI implements JSide {
  private at;

  public JGUI(ATSide at){
    this.at = at;
  }

  public void foo(){at.bar()}
}
```

```
def local := object: {
  def bar(){system.println(“k”);}
}

def jSide := jlobby.JGUI.new(local);
jSide.foo();
```