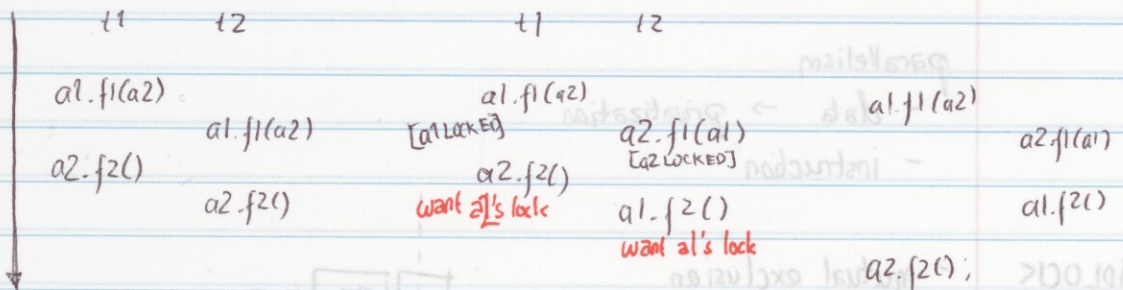


11/10/2010  
ECE 445

an object synchronized method  
can call the same object method

**LOCK IS PER OBJECT**

CASE:  $t1 = \text{new MT}(a1, a2);$   $t2 = \text{new MT}(a1, a2);$   
 $t1 = \text{new MT}(a1, a2);$   $t2 = \text{new MT}(a2, a1);$



NO CIRCULAR WAIT

OH Mon 4-6 PM  
Tue 1-2 PM

```
for (i=0; i < LargeNum; i++) {
    a[i] = b[i] * c[i];
}
```

```
for (i=1; i < Large; i++) {
    a[i] = a[i-1] + b[i] * c[i];
}
```

loop-carry dependence  
hard to parallelize

No deadlock if it is removed (NO CIRCULAR WAIT)  
 with (a1, a2) doesn't cause deadlock

<join>