**Introduction**

- Sequence Based Localization (SBL) assumes equal transmit power.
- SBL works by dividing the entire area into faces by equal RSS lines. The largest of these faces dictates the worse case localization error.
- We can redistribute these faces by either changing the node locations or their transmit power.
- For Non-Uniform transmit power Equal RSS lines transform into Equal RSS circles.

**Example**

USC Cinema School Implementation

**Observations**

- Beacon locations and power are symmetric with respect to the center of the plane in case of OPT(XY) and OPT(XYPwr).
- Optimized Beacon locations tend to be on $X = Y$ and $X = -Y$ if center of the plane is considered the origin.
- Our simulations suggest first optimizing for location assuming equal powers, and then optimizing for power doesn’t yield any further improvement.

**NU-SBL with ZOOM**

- Max-Area: 1.9m$^2$
- Max-Area: 0.925m$^2$
- Max-Area: 0.47m$^2$
- Max-Area: 0.05m$^2$

**Results**

- Error vs. Standard Deviation
- Error vs. Standard Deviation
- Error vs. Standard Deviation