Validation of Standalone 5G FWA

- Objective
  - ✓ Dish is developing and deploying Standalone 5G FWA (Fixed Wireless Access)
  - ✓ The system will leverage Dish's low band n71 to maximize the outdoor coverage
  - ✓ The task is to verify and validate the link budget predictions in the field, i.e., for a given throughput target, what is the coverage (in distance) the system can provide considering the device height, antenna angle (azimuth and elevation) and channel condition
  - ✓ It will provide the students with the opportunity of learning real world 5G ORAN engineering by interacting with and learning from Dish engineering experts

- Activities
  - ✓ Task will be guided by Dish engineers
  - ✓ Measure coverage for a given throughput target and correlate the data with RSRP/RSRQ/RSSI
  - ✓ Coverage comparison against the link budget prediction and channel modeling
  - ✓ Derive the device installation guidelines

- High level plan
  - ✓ Training for 1 week
  - ✓ Measurement and testing for 2.5 weeks
  - ✓ Report and wrap for 0.5 weeks
  - ✓ Graduate students who have some wireless background are preferred
  - ✓ Number of students requested: 4