

# **Fundamental Flame Spread and Flame Spread on Surfaces Workshop on Fire Growth and Spread on Objects**

## **Session Summary**

Kathy Notarianni, Chair

After the session, the discussion addressed several themes that serve as an effective summary. These fall under three main categories:

Main questions are: Will it propagate? How far and how fast? How approximate is it? We agreed that this is a function of parameters such as: ignition source and strength, heat flux, and ignition temperature, however, model approaches vary (gas phase, solid phase, and material property-based).

Different models are needed for various applications and levels of detail – no interest in creating one “super-model.”

Our ability to do theory exceeds our willingness to do experiments needed as a “reality check” An experimental program should:

1. Burn real materials that are well-characterized by components and repeatable
2. Experiments should be heavily instrumented including radiative feedback to burning item, temperature, and flame height.
3. No room consensus, some advocate no room, some a realistic room (with floor and ceiling materials and a window), some additional ISO room tests.
4. Experiments should be a team effort, include multiple partners in test design, multi-year tests with lessons learned.