

## **Particle Characterization: Module 2, Lecture 3**

1. What may be some typical axes of a 3D “shape space”?
2. What is the major limitation of a deterministic approach to shape characterization?
3. Discuss the role of the “loss function” in trainable shape classifiers.
4. How does a “trainable classifier” work?
5. How do “syntactic” methods differ from “verbal descriptors”?
6. What is the relevance of “graded memberships” for shape analysis?
7. Highlight the difference between “distance function” and “common property” approaches to shape assessment.
8. What are the key elements of shape characterization?
9. What are the key steps in a systematic process for shape evaluation?
10. Can shape be quantified without referencing size?