Recitation 3: Dimensional Analysis and Similitude

1. DA and Model Testing -- motivation
2. Buckingham’s P theorem examples: Force on body due to gravity waves, Meteorite impact
3. Similitude example: Drag force on automobile prototype/ mode (supplemental problem M18)
4. Importance of SP’s

Appendix 1: Dimensions of fluid mechanics properties
Appendix 2: (Some) dimensionless groups in fluid mechanics
Appendix 3: CV examples (boundary like over a flat plate, etc)