Dynamic Mode Decomposition of numerical and experimental data PETER SCHMID, Imperial College London — DMD extracts dynamic information from a sequence of flow fields generated by numerical simulations or physical experiments. It can be used to reconstruct a low-dimensional inter-snapshot map whose spectral properties describe the underlying fluid behavior contained in the processed flow fields. This tutorial gives a brief introduction to the method, demonstrates its applicability to a variety of flow situations and discusses extensions and generalizations. Examples will be drawn from numerical and experimental data of a wide range of applications.

Peter Schmid
Imperial College London