**HPCAD敲门砖读物**

（更新时间：2019年9月）

1、离心压气机内流机理：

Van den Braembussche RA. Optimization of Radial Impeller Geometry[R]. Educational Notes RTO-EN-AVT-143, Paper 13, 2006.

2、离心压气机设计优化：

Hehn A, Mosdzien, M, Grates D, Jeschke P. Aerodynamic Optimization of a Transonic Centrifugal Compressor by Using Arbitrary Blade Surfaces[J]. ASME Journal of Turbomachinery, 2018, 140: 051011-1-10.

3、轴流压气机内流机理：

Wang F, Carnevale M, di Mare L, Gallimore S. Simulation of Multistage Compressor at Off-Design Conditions[J]. ASME Journal of Turbomachinery, 2018, 140: 021011-1-10.

4、轴流压气机设计优化：

Ikeguchi T, Matsuoka A, Sakai Y, Sakano Y, Yoshiura K. Design and Development of a 14-Stage Axial Compressor for Industrial Gas Turbine[C]. ASME-GT2012-68524.

5、伴随优化方法：

Papadimitriou DI, Giannakoglou KC. A Continuous Adjoint Method with Objective Function Derivatives Based on Boundary Integrals for Inviscid and Viscous Flows[J]. Computers and Fluids, 2007, 36: 325–341.

6、并行CFD算法：

Slotnick J, Khodadoust A, Alonso J, Darmofal D, Gropp W, Lurie E, Mavriplis D. CFD Vision 2030 Study: A Path to Revolutionary Computational Aerosciences[R]. NASA/CR–2014-218178.

7、高阶CFD算法：

Wang ZJ. High-order Methods for the Euler and Navier–Stokes Equations on Unstructured Grids[J]. Progress in Aerospace Sciences, 2007, 43:1-41.

8、先进湍流模型：

Durbin PA. Some Recent Developments in Turbulence Closure Modeling[J]. Annual Review of Fluid Mechanics, 2018, 50:77–103.

9、不确定性CFD：

Le Maître OP, Knio OM. Spectral Methods for Uncertainty Quantification-With Applications to Computational Fluid Dynamics[M]. Chapter 1, 2010, New York: Springer..

10、AI-CFD

Raissi M, Yazdani A, Karniadakis GE. Hidden Fluid Mechanics: Learning Velocity and Pressure Fields From Flow Visualization. Science, 2020, 367(6481): 1026-1030.