

Support to Safety Analysis of Hydrogen and Fuel Cell Technologies

Verification type	Methodology
Database reference	MET-5
Topic / Application	Methodology
Physics	Nuclear RANS Couette flow Flat Plate Boundary layers
Summary	An extensive paper on the methods recommended for generating V&V benchmarks. Contains useful set of 4 benchmarks (manufactured, analytical, 2xnumerical)
Description	The paper sets out the rationale for improving quality of V&V to improve credibility of computational solutions. In particular the authors identify the problem of the limited number of benchmarks of sufficient quality to support verification. The paper sets out the requirements of high quality verification benchmarks, and provides a number of such benchmarks as case studies. These examples are useful for H2 safety simulation practitioners.
Case Title	Verification and validation benchmarks
Authors	William L. Oberkampf Timothy G. Trucano
Year	2008
Online reference	Nuclear Engineering and Design 238 (2008) 716–743
Case image	<p>Method to detect sources of error in code verification</p>
Governing equations	