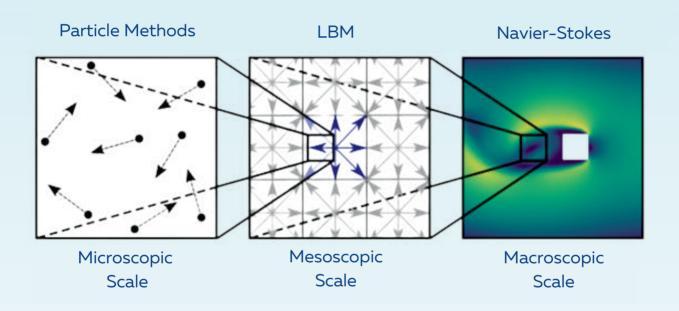


# SANKHYASUTRA TARAL

#### HIGH-FIDELITY FLUID DYNAMICS SIMULATION TOOL

SankhyaSutra Taral is a state-of-the-art simulation platform for Computational Fluid Dynamics (CFD). Based on the Entropic Lattice Boltzmann Method (LBM), SankhyaSutra Taral offers a model free approach for highly accurate CFD simulation. SankhyaSutra Taral provides tremendous productivity boost to solve complex engineering problems and is designed to minimize dependence on long physical prototyping cycles.



#### **FEATURES**

- Inherently stable Entropic LBM
- Incompressible, Subsonic and Transonic flows
- · High Reynolds & Mach number
- Complex & moving geometry
- · Transient analysis by default
- Coupled 6 degrees of freedom solver
- Highly scalable code

### **BENEFITS**

- · Minimal meshing effort
- Web interface for easy access
- · Network license by default
- · License used only for simulation run
- Licensing based on number of cores
- Easy extension to Multiphysics simulation
- · Aeroacostics via postprocessing

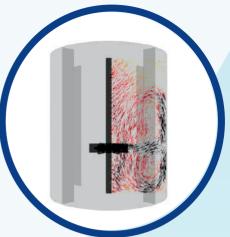
||DRIK GANITA AIKYA|| - SIMULATION WITHOUT APPROXIMATION

### **APPLICATIONS**

- Virtual Wind Tunnel
- · Stall prediction and post-stall behavior
- Aeroacoustics flow-induced noise
- Dynamic Stability Derivatives
- Transonic flow analysis
- Unmanned Aerial Vehicles/Drones
- Store Separation
- Mixing in reactors and tanks







SANKHYASUTRA TARAL CAPTURES COMPLEXITY OF REAL LIFE PROBLEMS OFFERING NEW WAYS OF DESIGN OPTIMIZATION

## **ABOUT US**

SankhyaSutra Labs provides high-fidelity multiphysics and aerodynamics simulation software that leverages highly efficient computational methods, complemented by an optimally architected High Performance Cluster (HPC) to achieve reliable simulation. Our tools find applications primarily in aerospace and defence, automotive, semiconductor manufacturing, and process industries during many phases of the product lifecycle including design, operation, and maintenance. The technology also enables fundamental insights into physical phenomena including fluid dynamics, heat transfer, chemical reactions and particle dynamics. Digital twins developed using SankhyaSutra's technology are key enablers of Industry 4.0.

Incubated in 2015, SankhyaSutra Labs has its R&D centre in Bangalore with target customers across the globe. The name SankhyaSutra literally translates to 'numerical algorithms' in Sanskrit. SankhyaSutra Labs is a subsidiary of Jio Platforms Limited, which is a subsidiary of Reliance Industries Ltd.

https://sankhyasutralabs.com

### **CONTACT US**

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