

In order to identify the most efficient and reliable methods or solvers for modelling of rarefied gas flows, it is proposed to choose a few benchmark problems to be solved by different methods. Further, the obtained results and computational efforts will be compared.

Two benchmark problems have been specified: rarefied gas flow through short tubes ([link to description](#)) and through short channels ([link to description](#)). Theoretical and experimental groups are invited to present their theoretical and/or experimental results on these problems for further comparison during the workshop. Both published and unpublished results are welcome for the comparison. Each participant will give a short talk about his/her results. Then, an extended talk with a compilation of all presented results will be given. To participate in the comparison, please, submit an abstract including the words "benchmark problem(s)" in its title. If the abstract is accepted, an extended description of your results will be requested on April 15, 2011 for the preliminary compilation.

If you want to clarify the statement of the problems, do not hesitate to write to Felix Sharipov (sharipov@fisica.ufpr.br)