APPLICATION OF HOLO ALGORITHMS IN RADIATIVE HEAT TRANSFER

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HOLO algorithms [1] are now among most popular methods for solving radiative heat transfer. Scientists of the Russian nuclear centers have developed their unique HOLO algorithms some of which are used ti simulate radiative heat transfer.

The paper answers a number of question that emerge in the use of HOLO algorithms for radiation heat transfer simulation. These are the following questions:

5. What do the correction methods, synthetic methods, KP methods, and HOLO algorithms have in common?

6. In what do they differ?

7. What are the conditions for getting a HOLO solution which would agree with the solution of the kinetic equation?

8. Should the difference schemes used at different stages of the HOLO algorithms be necessarily consistent in order that the resulted solution be equivalent to the solution of the kinetic equation?

References

1. **Chacon, L.** Multiscale high-order/low-order (HOLO) algorithms and applications [Text] / L. Chacon, G. Chen, D.A. Knoll, C. Newman, H. Park et al. // J. Comp. Phys. – Feb. 2017. – Vol. 330. – P. 21–45.