

Meshless Method Applied to Low Speed Wing Aeroelasticity

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Key Words: *Meshless Method, Aeroelasticity, Low Speed Velocity, Airplane Wing.*

A meshless method is applied to a computational aeroelasticity problem. Both structure and fluid domains have been modelled with a meshless method. The moving least squares approximation scheme is used to interpolate field variables in the governing differential equations of the problem. The method is implemented to a wing subjected to a low speed velocity air flow. In order to investigate the proposed approach, convergence tests are performed and results has been compared with those of different approaches, such as collocation, finite volume, finite element, boundary element, and Trefftz methods.

REFERENCES

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