

EXPLICIT DYNAMICS WITH PARTITION OF UNITY METHODS

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In this paper we are concerned with the performance of generalized finite elements methods based on the partition of unity framework in explicit dynamics simulations. Our approach employs a variational mass lumping technique [1] and we focus on the impact of various basis selection schemes (i.e. stabilization techniques [2]) on the critical time step size, etc. We present numerical results for two and three dimensional applications.

REFERENCES

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