

Abstract Submitted
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On verification and validation of spring fabric model ZHENG GAO,
QIANGQIANG SHI, YIYANG YANG, XIAOLIN LI¹, Stony Brook University —
An enhanced spring-mass model has been developed to mimic the complex behavior
of parachute canopy in the air flow. Given the Young's modulus and Poisson's ratio,
the model has the ability to duplicate the realistic strain and stress of the elastic
membrane by including the angular deformation energy in the triangulated mesh.
The numerical results verify the effectiveness of the proposed model and demonstrate
its convergent property. In addition, GPU-based parallel computing techniques are
applied to accelerate the computational speed and increase the resolution of numer-
ical results.

¹Advisor

Zheng Gao
Stony Brook University

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