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| Volume Enclosed by Subdivision Surface with Sharp Creases | | |
| Abstract | Catmull-Clark | |
| Loop algorithms with sharp creases | |
| Introduction | Applications | the design of surfaces with sharp creases to enclose a specific volume |
| the deformation of surfaces subject to volume preservation |
| Article structure | Recap the volume formula for subdivision surfaces |
| Elaborate on the implications for facets that are affected by crease subdivision rules |
| Derive the volume contribution for the most relevant local mesh topologies of facets adjacent to creases in a Catmull-Clark, and Loop mesh |
| Background | M | a closed, orientable mesh |
|  | determined by a collection of trilinear forms |
|  | f | facets |
|  | f belongs to M |
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