

Title of the Article: Curved folding and planar cutting of simple closed curve on a conical origami

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Comments to the Author(s)

I see the authors try to solve the issue with the definition of conical origami by requiring the image of the map u to be the whole cone, instead of being contained in a cone. This is not needed and even not enough to solve the issue. For example consider the following folding of the plane: $v(x,y) = (f(x), y)$ where $f(x) = x-2$ if $x > 1$, $f(x) = -x$ if $|x| < 1$, $f(x) = x+2$ if $x < -1$. Now if u is a conical origami, then also the composition of u with v is a conical origami. But this example shows that a conical origami is not guaranteed to send half lines starting from O to half lines. In fact v transforms lines in broken lines. However this property of conserving half lines is used in the proof of Proposition 2.1.

As I have already suggested the solution to this issue could be to define a conical origami to be a 1 -homogeneous map: $u(tx, ty) = t u(x,y)$. This gives the desired property of sending rays to rays.

The issue is not so much important, since the other implication (the possibility to cut a star-shaped closed curve) is much more important and is not affected by this problem. However it would be nice if this issue can be addressed.