Luisto, Rami; Prywes, Eden
Open and discrete maps with piecewise linear branch set images are piecewise linear maps.
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Summary: The image of the branch set of a piecewise linear (PL)-branched cover between PL n-manifolds is a simplicial \((n - 2)\)-complex. We demonstrate that the reverse implication also holds: an open and discrete map \(f : S^n \to S^n\) with the image of the branch set contained in a simplicial \((n - 2)\)-complex is equivalent up to homeomorphism to a PL-branched cover.

MSC:
30C65 Quasiconformal mappings in \(\mathbb{R}^n\), other generalizations
57M12 Low-dimensional topology of special (e.g., branched) coverings
57M30 Wild embeddings

Keywords:
quasiregular mappings, branched covers

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