Universität Bielefeld
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AG Genominformatik
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Sequence Analysis 3
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Exercises

Number 9, Discussion: 2024-June-27

1. In parametric alignment with paranmeters d (gap open cost) and e (gap extension cost), is it possible that a single alignment is always optimal?

2. Prove that when the ray search algorithm computes an alignment at a point r along ray h, then none of the alignments computed previously (in this execution of the ray search) are optimal at r.

3. Prove that in parametric alignment of two sequences of lengths m and n, $n \leq m$, there can be at most $O(n)$ polygons in the parametric decomposition.