

Errata For: A Novel And Well-Defined Benchmarking Method For Second Generation Read Mapping

Manuel Holtgrewe

Anne-Katrin Emde
Knut Reinert

David Weese

Version 1
June 2011

1 Equivalence Class Definitions

There is an error in the section “Matches as Equivalence Classes,” in particular the second sentence in following statement is incorrect.

We now define two matches a, b to be equivalent ($a \equiv b$) if they are k -trace equivalent or neighbour equivalent. The disjunction of two equivalence relations yields another equivalence relation.

This problem can be fixed, however, by the following definition of match equivalency.

Definition 4 (Match Equivalence) *We say that two matches a, b are equivalent ($a \equiv b$) if there exist $\ell \geq 0$ feasible connecting matches $a \leq m_1 \leq \dots \leq m_\ell \leq b$ such that:*

$$(a \stackrel{kT}{\equiv} m_1 \vee a \stackrel{N}{\equiv} m_1) \wedge \dots \wedge (m_{i-1} \stackrel{kT}{\equiv} m_i \vee m_{i-1} \stackrel{N}{\equiv} m_i) \wedge \dots \wedge (m_\ell \stackrel{kT}{\equiv} b \vee m_\ell \stackrel{N}{\equiv} b).$$

(If $\ell = 0$ then two matches are equivalent if $a \stackrel{kT}{\equiv} b$ or $a \stackrel{N}{\equiv} b$).