

Dear all,

Suggested changes to section **3.2. Definitions.** of the motion:

I. First line in third paragraph under 3.2.1:

A **basic arithmetic operation** is one of the seven functions  $+$ ,  $-$ ,  $\cdot$ ,  $\div$ , fma, square root, and the exact dot product (edot).

II. After 3.2.6. add:

For two  $n$ -tuples  $x_i, y_i, i = 1(1)n$ , the function edot computes the dot product  $x_1 \cdot y_1 + x_2 \cdot y_2 + \cdots + x_n \cdot y_n$  exactly.

III. 3.2.7.:

**interval hull.** (short form: **hull.**, if any confusion can be excluded) When not qualified by the name of a finite-precision interval type, the interval hull of subsets  $\mathbf{s}$  of  $\mathbb{R}$  is the least upper bound of  $\mathbf{s}$  in  $\{\overline{\mathbb{IR}}, \subseteq\}$ .

Rationale: In  $\mathbb{R}$  the interval hull of subsets  $\mathbf{s}$  of  $\mathbb{R}$  is the convex hull. In the two or in higher dimensional cases the two hulls are different in general. In  $\{\mathbb{PR}, \subseteq\}$  the hull of subsets  $\mathbf{s}$  of  $\mathbb{R}$  is the union.

IV. Delete 3.2.20.

V. Exchange 3.2.9. with 3.2.10.

Best regards  
Ulrich