

Factorisation of Motions

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> **read(taux) :**

> **read(predef) :**

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+ Factorisation of Quaternion Polynomials

+ Motion Polynomials

+ Motions

+ Linkages

+ The Theory of Bonds

+ Results and Open Questions

- Homework

Construct an animation of a 7R linkage.

First, construct a sequence of 7 motion polynomials m_1, \dots, m_7 in t such that

- $\text{Mulall}(m_1, \dots, m_7)$ is a real polynomial
- m_i is a revolution polynomial for $i = 1..7$
- if $j = i + 1 \pmod{7}$, then $\text{Mul}(m_i, m_j)$ is not a revolution polynomial

Then execute the following line in Maple:

> **display(movemots([m1, m2, m3, m4, m5, m6, m7], t, 51), insequence=true);**

The program `movemots` takes a list of motion polynomials satisfying the three conditions above, the variable, and an integer which is the desired number of frames. It produces a sequence of 3d objects which can then be displayed as above.

+ The Team