

Re: Numerically solving a system of polynomial equations

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Liebe Yaroslav ,

Can you transform the system you're working on into a homogeneous one by adding more variables?

your simple exemple then becomes:

$$x*t + x*y = m_1$$

$$y*t + x*y = m_2 \text{ with } t = 1 ,$$

using inverses $y' = 1/y$

$$m_2 * y' + m_2 * t' = a$$

$$m_1 * x' + m_1 * t' = a , a = m_1 * m_2 / (x * y * t) , t' = 1 ;$$

all unknown x' , y' ...but t' being computed as

mutiples of a ,

Hope it helps ,

Alain.

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