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Subject: Re: IDLgrModel, rotation angles  
Posted by [James Kuyper](#) on Mon, 23 Feb 2004 18:27:40 GMT  
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lyubo wrote:

>  
> Hello,  
>  
> I have a transformation matrix and I must find the amount of rotation  
> in degrees. How can I do that? Any help would be appreciated.  
>  
> Thank you,  
>  
> Lyubo

The eigenvalues of a pure rotation matrix are

EXP(COMPLEX(0,-theta))  
1.0  
EXP(COMPLEX(0,theta))

where theta is the rotation angle in radians. Therefore,

!RADEG\*MAX(IMAGINARY ALOG(HQR(ELMHESS(rot))))

Will give you back the rotation angle of rot in degrees.

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