
Subject: Re: ATAN for $[0, 2\pi]$ range

Posted by [John-David T. Smith](#) on Mon, 29 May 2000 07:00:00 GMT

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Luis Alonso wrote:

>
> i need for some calculations the ATAN function solved on the $[0, 2\pi]$
> interval
> is there any direct way to do it?
>
> thanks
> Luis =)

$\text{ang} = \text{atan}(Y, X) + (Y < 0 ? 2 * \pi : 0.)$

Or if you can live with $[-\pi, \pi]$ then the regular $\text{atan}(Y, X)$ will suffice. Note that if you have only one argument (Y/X precomputed), you cannot recover the quadrant.

JD

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