



Fig. 2.6. Relation of uniform circular motion to sinusoidal motion via Euler's identity, $e^{j\omega t} = \cos(\omega t) + j \sin(\omega t)$. The projection of $e^{j\omega t}$ onto the real axis is $\cos(\omega t)$, and the projection onto the imaginary axis is $\sin(\omega t)$. (Fig. 1 in Petersen [1985] gives another, stunning view of this concept.)

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