

L – me say L !

Words by Walter F. Smith 2003

Tune: Banana Boat song (traditional) Note: verses 3 and 5 are sung using the “Beautiful bunch of ripe bananas” version of the tune.

(A dash after a syllable indicates that it’s sung over two notes.)

Start out slowly.

C F C
1. L – me say L-

C G7 C
Angular momentum equals r cross- p - !

C F C
L – vector cap L

Slow down even more for this next line

C Am G G7 C
Magnitude of $I \omega$, don’t you see.

Pause, then start up slowly, gathering speed as you go through the next two lines.

C G7
2. Come, let us calculate angular momentum!

C G7 C
Angular momentum equals r cross- p - !

C G7
 r from the center gets crossed into momentum!

C Am G G7 C
Magnitude of $I \omega$, don’t you see.

C
3. Spin all night, and spin all day!

C G7 C
Angular momentum equals r cross- p - !

C
L is conserved, it won’t fade away!

C Am G G7 C
Magnitude of $I \omega$, don’t you see.

C G7
4. L is a vector, and it points along the axis.

C G7 C
Angular momentum equals r cross- p- !

C G7
r p sin theta never wanes and never waxes!

C Am G G7 C
Magnitude of I omega, don't you see.

C
5. Torque external can change the L!

C G7 C
Angular momentum equals r cross- p- !

C
tau is d-L d-t, now ain't that swell!

C Am G G7 C
Magnitude of I omega, don't you see.

C G Am
6. L – me say capital L

C G7 C
Angular momentum equals r cross- p- !

C G Am
L – me say vector cap L

C Am G G7 C
Magnitude of I omega, don't you see.

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