



A Physics Songbag Redux

As part of wrapping up our World Year of Physics celebrations in PHYSICS TODAY, we present the winner of the July issue's lyrics-writing contest and offer a new song. Lyrics submissions came from places as far apart as India, New Zealand, and the US. The winner, as chosen by the editors of PHYSICS TODAY, is *The Entanglement Tango* by John Roeder of The Calhoun School in New York City. Roeder teaches both a "Physics First" course to all Calhoun ninth graders and a more traditional physics course to high-school juniors and seniors.

Our special features throughout the year were assembled by a Year of Physics task force, dubbed the "Yoppers." Michael Mendelson (<http://www.slidingscalemusic.com>) came up with *Yopper's Stride* for us, and it has now evolved into *The Physics Today Rag*. We hope you enjoy it.

The Entanglement Tango

(Music © 2004 by Michael Mendelson)

Lyrics by
John L. Roeder

MODERATO (♩ = 150) **G MIN** **D7**

If there's a photon that from any atom is emitted and it runs into a mirr'r that makes it to be splitted And
pair of par- ticles that once were inter- acting and it may be that they no longer are at- tracting They
though

F **Bb** **D** **G MIN** **G MIN**

if what one does 'gainst the other is pitted they are doing the En- tangle- ment Tango If there's a
will always be found on each other impacting as doing the En- tangle- ment Tango— Just
they're

Eb **Bb** **D7** **G MIN** **G MIN**

how they do it is a mys- ter- y that keeps us guessing Some thought rel- a- ti- vi- ty they weren't po- sessed
entanglement was something 'bout which Einstein was pa- rochial "Bout the quantum theory's incom- pleteness he was vocal But
special But

G **D** **G MIN** **G MIN**

entanglement doesn't come messages pro- cessing doing the En- tangle- ment Tango— En-
that's because he thought from actions must so they're
the inter- be local and that tangle- ment Tango— Entangle-
must stopped the En-

G **D** **G MIN** **G MIN**

ment is pos- sible with superposi- tion to be in more than one quantum state must be your con- dition till measurement tells us what's
want to be entangled with another person you must split yourself into more than only one version till measurement finds
you by

G **G MIN**

real with some pre- cision real with the en- tangled object too. So if you
and what's making an in- cursion so En- tanglement's a tango not for you.

The *Physics Today* Rag

(Sung to the tune of "Yopper's Stride" © 2004 by Michael Mendelson)

Lyrics by
Stephen G. Benka

D B^b_7 D B_7

We know solvin' Nature's puzzles is so grati- fyin'. Challenges we like but what's so doggone mysti-fyin'—

E7 A7 D D#dim E7 A7

One piece of the action gives us little traction on the bigger picture for which we could have a bigger reaction.

D B^b_7 D B_7

Solvin' that e- quation and/or fightin' lab frus- tration takes its toll so now and then we need equi- bration.

E7 A7 D A7 D

When we get a headache, time to take a brain break and just sit back with that *Physics Today* rag.

B^b D D_7

Geo- astro- bio- physics, sometimes even metaphysics, optics, metrics, ethics, civics, even plastics and acoustics;

B^b D A7

We get hist'ry lessons and find out what govern-ments are doin'— all around the planet, coverin' the gamut.

D B^b_7 D B_7

Sometimes there is stuff that's just too difficult to think through. Mostly though we read what is both interesting and new.

E7 A7 D A7 D

Now and then it's stuffy, but it's never fluffy and I love to read that *Physics Today* rag.