

waves. However, the trope of applying the quantum mechanical notion that measuring something destroys its coherence to a non-quantum-mechanical process like Turner's unique and powerful improvisations hits an off note, at least to me.

At the heart of the book lies "Coltrane's Mandala," which combines the symmetries of the 12 notes of the western chromatic scale (A, A#, B, C . . . G, and G#) with the 5 notes of the pentatonic scale (A, C, D, E, and G) used in musical styles throughout the world, including jazz. *The Jazz of Physics* opens with an enigmatic visit by Alexander to the since deceased Yusef Lateef—a jazz multi-instrumentalist who was then a University of Massachusetts professor—for a discussion of the Mandala. It closes with an argument that Coltrane created the Mandala by synthesizing his understanding of relativity and applying it to his music.

The most interesting portions of the book are autobiographical. Alexander grew up in a Trinidadian family living in the Bronx. Later, he would discover the beauty of learning and the thrill of performing music and physics. And in time, he would rub shoulders with distinguished musicians and physicists. His stories are rich and personal; in them we see originality in physics and music and the growth of a mind finding its own path. Not only does he show the title and abstract of "A cyclic universe approach to fine tuning," but he also offers an image of the cover art of his 2014 album with Erin Rioux, *Here Comes Now*. Alexander communicates the joys and fears of life on the knife-edge of creativity.

But did Alexander achieve his goal of uncovering an isomorphism between physics and jazz akin to that between a resonant electrical circuit and a mechanical oscillator? Perhaps he has, though his short readable book does not present enough detail for the evaluation of such a claim. However, he has accomplished at least as much by presenting the metaphors driving creative inspiration in the creation of both new physical insights and new beautiful sounds.

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