

Some Links From My Journey Thinking About Racism & STEM Disciplines

S. James Gates, Jr.

The worldwide response of moral revulsion triggered by the broad dissemination of a video showing the extrajudicial execution of Mr. George Floyd (as the crescendo to far too many such occurrences) has compelled even the organizers of the ‘Strings 2020’ conference to engage me in this conversation for their global cyberspace attendees. Thus, I feel a duty to respond.

Since 1995, I have been preserving some small number of written reflections on my journey and observations as a scientist who is African-American. These works are in the forms of essays, not polished didactic narratives. Each essay is a free-standing document, though there are conceptual links and overlaps between them. Each was written after a period of some duration focused on answering a question raised by someone else. If left to my own natural tendencies, I return to the question, “Why is the mathematics of space-time supersymmetry, lying at the foundation and heart of string theory, so incompletely and poorly understood?”

The majority of these writings address questions around post secondary education and the struggles to maintain the meager and modest progress that has occurred within my lifetime. These do not deeply engage the questions of whether ideas in STEM disciplines can be ‘black’ nor if such do exists, do they matter? Neither have I written on the question of whether racism is systemic or a fractal tessellation in STEM disciplines. However, something has changed. The prima facie evidence of this by very my existence as the first African-American theoretical physicist elected to the U.S. National Academy of Sciences (since it was established by President Lincoln), makes progress impossible for me to deny.

I do not represent myself as an authority in this complicated domain of human society as I will only present my thoughts for others to assay, contemplate, evaluate and weigh as they come to decisions about their own beliefs and actions. I fervently wish I could present data or mathematics as that is the foundation with which we scientists are most familiar. Unfortunately, the numbers of relevant data points is so small that I can only offer anecdotes and thoughts that flow from these.

Before I provide the promised links leading to my thoughts, there is one other figure I believe, especially physicists, might wish to consult on the matter of racist practices committed against African-Americans in the U.S. and of course, we see echoes of these practices and treatments toward many peoples around the world. Unfortunately to many of us, a residue of this seems to apply in physics and more general the STEM disciplines.

If there is a secular Pope in the magisterium of physics, it is Albert Einstein. Though almost universally revered by physicists, very few are aware of what Einstein described as a “disease” he found in the U.S.A. One should also be aware that even Einstein was not a being of perfection on the topic of race as demonstrated by some of his writings from a visit to Asia in the early nineteen-twenties. However, he spoke powerfully about his impressions of racism directed toward African-American in his adopted country.

So in the following, I will commend to my fellow physicists thoughts from Einstein via a set of links, which are then followed by links to my essays. I hope the following content will prove useful to the reader.

Einsteinian Links

(1.)

Fred Jerome, and Rodger Taylor

“Einstein on Race and Racism,”

Rutgers Univ. Press (2006),

ISBN-10: 0813539528,

ISBN-13: 978-0813539522,

<https://www.amazon.com/Einstein-Race-Racism-Fred-Jerome/dp/0813539528>

(2.)

<http://www.autodidactproject.org/my/einstein3.html>

(3.)

<https://news.harvard.edu/gazette/story/2007/04/albert-einstein-civil-rights-activist/>

(4.)

<https://www.lincoln.edu/news-and-events/news/albert-einstein%E2%80%99s-1946-visit-lincoln-university-featured-during-national>

(5.)

<https://www.nytimes.com/1946/05/04/archives/einstein-is-honored-by-lincoln-university.html>

SJG Links

(1.)

“Equity vs. Excellence: A False Dichotomy In Science & Society,”

<http://www.the-scientist.com/?articles.view/articleNo/17478/title/Equity-Vs--Excellence--A-False-Dichotomy-In-Science-And-Society>

(2.)

“Thoughts On Creativity, Diversity & Innovation in Science & Education,” p14,

<http://www.aaas.org/sites/default/files/LawDiversityBook.pdf>

“Thoughts On Creativity, Diversity & Innovation in Science & Education,”

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.183.3836&rep=rep1&type=pdf>

(3.)

U.S. Supreme Court Citation

<http://docplayer.net/7772613-In-the-supreme-court-of-the-united-states.html>

<http://mitblackhistory.blogspot.com/2016/07/supreme-decisions-dr-sylvester-james.html>

(4.)

“Einstein vs. Roberts,”

<http://science.sciencemag.org/content/351/6280/1371>