讀丘成桐自傳[1]與其數學[2]生涯[3]

1965 瑩社王健華醫師(美)

最近閱讀星島日報見新聞(見右) 有關"丘成桐數學科學中心"。但並未揭出他今年由哈佛大學退休，將全心致力於培養下一代，甚使我對這位培正同學敬佩之極。中國文化復興亦極之有望，速寫文章，希望讀者亦有同感。

註：

1. "The Shape of A Life" by Shing-Tung Yau 2019 Yale University Press
2. 數學"mathematic" 源自Latin &Greek (mathematicus) 源自中文" 默思物剔" 剔，分解也。

算術" Arithmetic" =A + rith + metic

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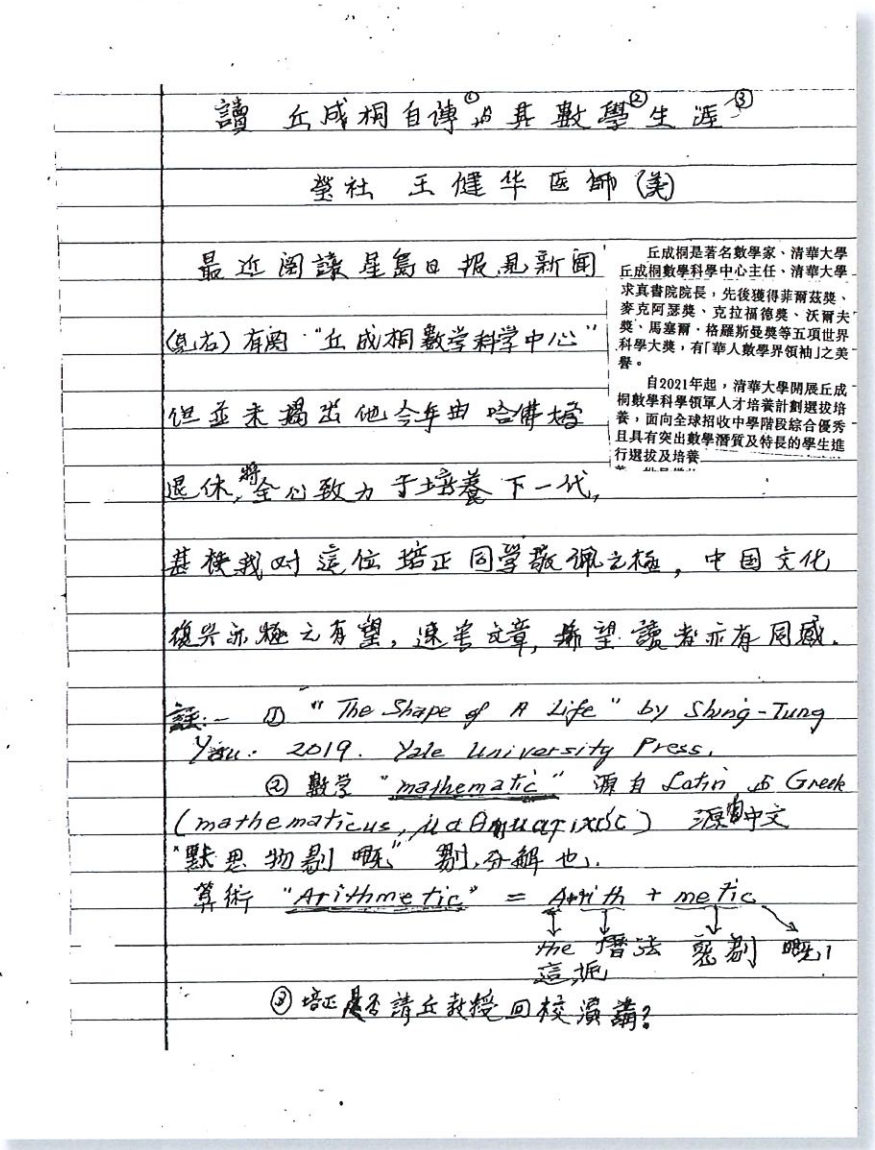
這/the 曆法 密剔 既

3. 培正是否請丘教授回校演講？



讀 丘成桐自傳[1]與其數學[2]生涯[3]

瑩社 王健华 医師(美)

最近閱讀星島日报見新闻

(見右) 有関 "丘成桐數学科学中心"

但並未揭出他今年由哈佛大

退休，將全心致力于培養下一代，

甚使我对這位培正同学敬佩之極，中国文化

復兴亦極之有望，速写文章，希望讀者亦有同感。

註：- ① "The Shape of A Life" by Shing-Tung Yau. 2019. Yale University Press.

② 數学 "mathematic" 源自 Latin & Greek (mathematicus, μαθηματικός) 源自中文 "默思物剔哂" 剔，分解也。

算術 "Arithmetic" = Arith + metic

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這/既

③ 培正是否請丘教授回校演講？

丘成桐是著名數學家、清華大學丘成桐數學科學中心主任、清華大學求真書院院長，先後獲得菲爾茲獎、麥克阿瑟獎、克拉福德獎、沃爾夫獎、馬塞爾·格羅斯曼獎等五項世界科學大獎，有「華人數學界領袖」之美譽。

自2021年起，清華大學開展丘成桐數學科學領軍人才培養計劃選拔培養，面向全球招收中學階段綜合優秀且具有突出數學潛質及特長的學生進行選拔及培養

喜見中國繪畫曙光

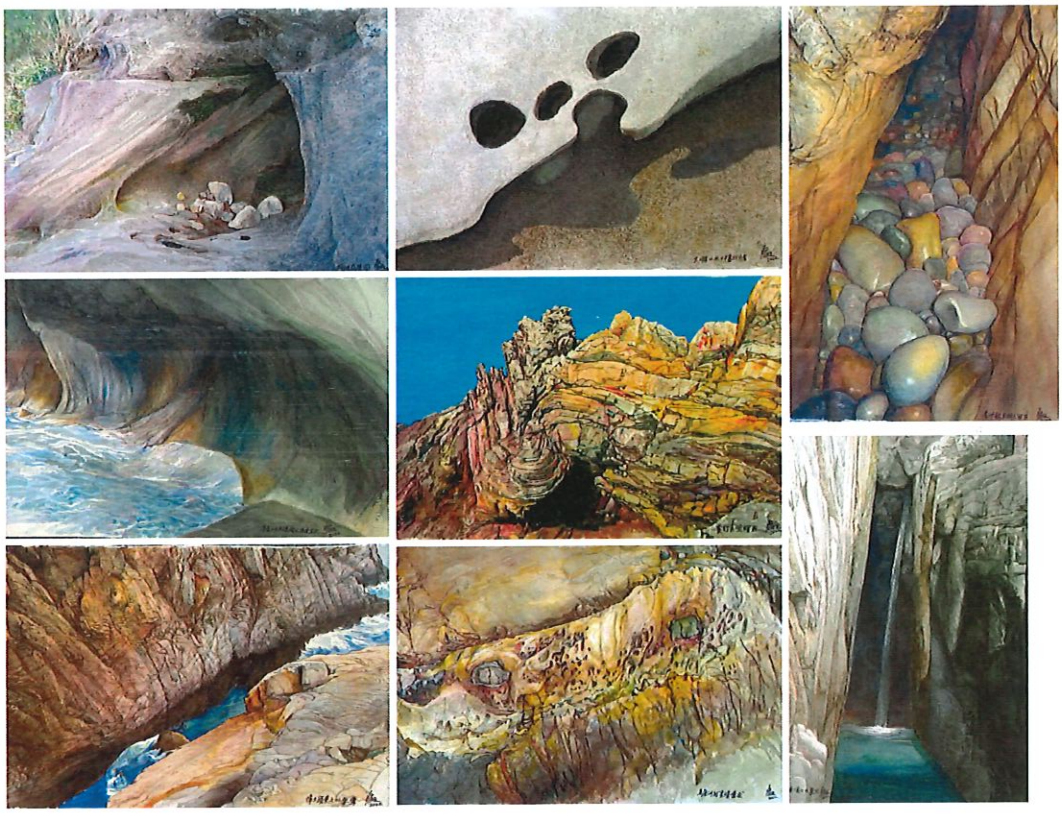
1954匡社　江啟明撰

一天我在電視上看到國內有畫家用水墨繪上大幅氣勢磅礴的山水畫，令我刮目相看。它不是我們見慣的傳統山水畫，是具有現實感及大自然的氣概，除有文人畫的風範及內涵外，已滲入古今及宇宙之方圓遠想，與靈共通共融的天人合一的境界。我常說藝術最高的境界就是達到靈的層面。這幅山水畫放射出一道溫暖的曙光，直射到我的眼睛裡，滲入我的心坎裡，我很開心！

中國傳統繪畫，有被稱為「文人畫」。文人畫其實都是些有社會地位的文人仕大夫手筆，內容大都是山山水水、松梅竹菊及花鳥蟲魚，都是上層階級的「寄意」，不求現實真實，但可取的他們十分注重畫家個人的人格修為及內功的深厚，技巧上講求「丹田」的運氣，不是一朝一夕的表面功夫，這也是一種涵養，是中華民族幾千年來積聚下來的遺產國寶，值得傳承，但取材及內容上部份已經不合時宜了，尤其是處理及表現手法。

西畫傳入中國只有百多年歷史，我是第三代。早年中國畫家以歐洲傳統風格為主，解放後就轉承蘇聯，一向都沒有自己中國人的面貌，藝術最失敗就是沒有自己民族的靈魂。也許近代中國積弱，有人還存在着崇洋的思想，總認為外國什麼都比自己的好，甚至「現代藝術」也一樣，這種思維要不得的，不要妄自菲薄，現代中國的年青人應要認真反思！

中國人今天不同往日，由地下站起來了，以往的恥辱及腐化應一筆勾銷，屬靈的藝術更應自立門戶，絕不能跟着別人屁股走。中國有自己的文化，有自己獨特的思維，更要緊記我們有自己民族的靈魂。我們當然也有自己缺點，有自己的包袱，只要決心改過，去弱留強，去蕪存菁，把自己本有的優越文化素質傳承提昇，發揚光大。我在我的文章《寫生》裡曾說，中國人在寫生畫也應有自己中國人的氣質及技巧上的特式，故我的素描注重單線勾勒，畫面採用陰陽虛實對比。我近年的水彩畫也逐漸刻意去擺脫西方那一套，盡量走自己認為的中國特式。工具物料素材是「死」的，主要在執筆的畫家，要懂得運用繪畫材料，怎樣去掌握去發揮，運用自己民族固有的文化優點去配合現代的新思維，讓我們新一代凝心聚力譜新篇！



傷老

1965耀社梁國豪撰

英雄最怕病來磨
人到老年苦事多
久咳方癒又痛風
寸步難行歎奈何
日暮途窮唯一哭
幸有餘力誦彌陀

舊詩一首

一九六五年級耀社梁國豪謹草 時年七十六

講筵歡尚在，
別緒迫人來，
聞說櫻花豔，
何如此地梅。

注：一九六五至六九年，肄業崇基中文學系。時助教黃君，考獲日本政府教育部獎助學金，赴東瀛深造，因草短詩贈別。歲月如梭，倏忽五十六載，今皆垂老。聊念曩作，以懷舊情。

一葉一菩提

1962旭社陳永平撰

2022年11月培正同學日是我社畢業鑽禧，
跟同窗聯袂再訪母校，見黌舍花葉，不免興懷。
多年前已就母校的花寫詩抒感，今補足全貌，
特縱筆寫葉。母校的花草，
留下我們崢嶸歲月的印記。花草不言、蘊情無限，
斑斑華髮，對此何堪？

(一) 新綠
一夜細雨飄灑
喚醒沉睡枝椏
串串晶瑩水珠
滋潤新生嫩芽
點染無邊春色
笑迎絢麗朝霞
沐浴和煦晨曦
期待茂密盛夏

(二) 樹蔭
公園　樹下　長椅上
靜坐　沉思　默想

成千上萬的葉
有高有低　有大有小
高不凌低　大不欺小
何其和諧美妙

朦朧中
化為一片平凡的葉
融入千千萬萬之中

（三）闊葉
小朋友
你見過葵扇嗎？

在那艱苦的年代
我們用巨大的葉
搧走炎熱
搧走鬱悶
搧走貧困
搧起東風
吹拂着今天的你們

孩子們啊
要惜福
要感恩

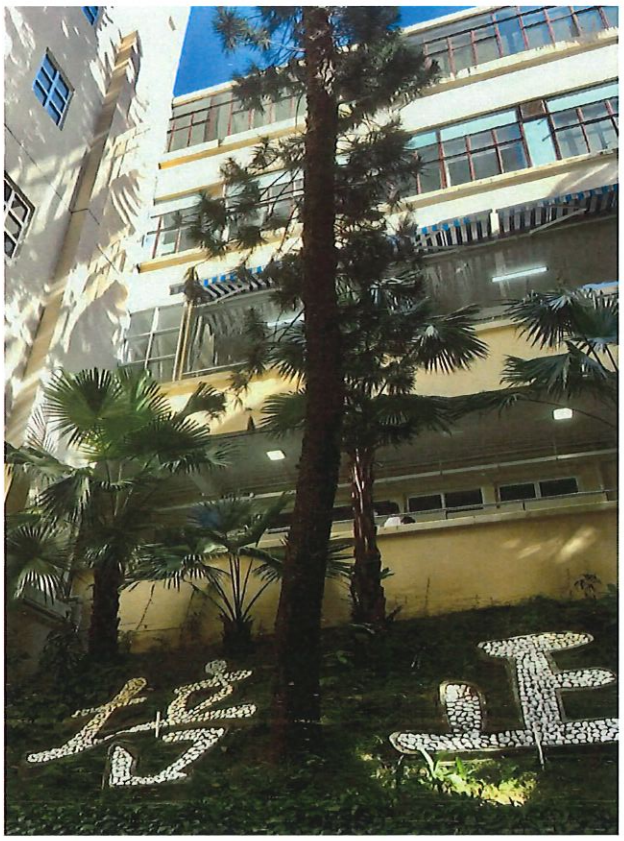
（四）針葉
又見斜徑旁雲杉
默默地守在校園
五年前　見過
十年前　見過
乃至六十多年前
時常走過你身邊

挺拔軒昂的樹幹
卻只有微細的葉
你像持戈而立
剛強的勇士
又像身披蓑衣
謙卑的智者

寄望幾年後……？
再見！

〈後記：在網上看到以下幾句話：
一朵花，開在哪裏都是芳香
一片葉，落在哪裡都是歸宿
一個人，走到哪裏都是生命
一顆心，想到哪裡都是情愫

如此灑脫、隨緣的人生心態，
值得我們這些八十上下的人
去細細品味。
抄錄在此，作為對花花葉葉
頌讚的結語。
2022年12月〉



校園內雲杉的針葉與蒲葵。
2022年11月19日攝

1955忠社 麥梓輝撰

青絲已去，白髮染頭！
兒女邁入中年，
孫輩吃穿不愁。
回首人生之路，
一腔熱血東流。

有的還沒退休，
就被上帝接走；
有的退休不久，
又躺醫院床頭。
我等非常幸運，
仍在到處晃遊。
無論你官民窮富，都要感恩知足，快樂地向前走。

事事量力而行，
別聽他人忽悠。
什麼老有老的資本，
什麼老有老的自由，
什麼名山大川，
什麼逍遙旅遊，
殊不知：家家有本難唸的經，人人都有難言的愁。

莫跟人比、不尋彆扭；
多點寬容、少點需求。
只要有個好身體，
就要快樂向前走。

現今的我們已失去了青春的激情，也淡化了，中年的勁頭。
經歷了，人間不平事，
喝盡了，塵世紅白酒。
展示了，你我的善與美，
藏起了，自己的苦與愁。
上奉養父母盡孝，下操勞子女紛擾。
我們捫心無愧，
要快樂地享受。

喜看半世紀滄桑變化，我們超越了，君王的享受。
不上早朝能知天下事，
不用筆墨可寫文章錦繡。
不問龍王能知四海波瀾。
無須騰雲可在藍天行走。

高鐵飛機已讓地球縮小，
電腦網絡早就天涯攜手。
我們趕上好時代，就要快樂地向前走。

我的同學、我的戰友、
我的親朋、我的伴偶，
自然規律要看透，
早走遲走都得走。
多想一些開心事，
憑藉一個好身體，
沒錢轉轉週邊景，
有錢來個環球遊。
愛畫的盡情畫，
愛唱的放聲吼，
愛跳舞使勁扭。

夕陽路上，快樂向前，
不留遺憾，不留後手。
活一個壽比南山松不老，
樂一個天長地久常聚首……

Introduction of "Comment on Albert Einstein–The Great Brain of the 20th Century Documentary" – By HYWOO

1953 誠社 吳漢榆

2018年魯重賢和許晉義合作發表了一篇題為Comments on The Invalid Proof of Einstein on L=MC^2 & E=MC^2 的論文。由於研究工作的新發現，今番再度合作，寫成" Comment on Albert Einstein– The Great Brain of the 20th Century Documentary"

本篇的目的是向世人揭示，雖然 因斯坦被認為是繼牛頓之後的偉大物理學家，但由於時代的局限性，〈相對論〉還未臻完善，還有發展空间。文章指出愛因斯坦的缺失如下:

※愛因斯坦提出量子力學關於光子的想法有缺失，他以為光子是無質量的粒子，他不認知其能量動張量單獨地與電磁波能量動張量是不一致的，他不能解釋光子能量等價於質量。其實，光子的能量是電磁能加引力能，因此可等價於質量，故 E=MC^2 公式必須修正。

※愛因斯坦的想象實驗 (thought Experimet)有誤導性。他沒有做實驗，就在著作中寫道：加熱金屬，質量或重量增加。

但我們的實驗證明正相反，這證明反引力(repulsive gravitation) 的存在，引力和電磁力的統一，E=MC^2並非無條件等價。

※中國科學院院士周培源教授最早發見並於1983年發表論文，指出協變原理(Covariance Pribciple)不能成立。其理論後來魯重賢用實例證明是正確的。

※愛因斯坦非線性方程無有界的動力解，而且與E=MC^2不一致。

※反引力的存在推翻引力只有吸引力之說，因此黑洞存在受到質疑。2020年諾貝爾物理學獎頒發予英國人Roger Penrose是沒有根據的。

還有其他評述，詳見作者原文。

文末附有六條註釋,有助讀者了解物理學界的一些事實和來龍去脈。

(2023.3.26)

作者簡介

許晉義　培正1966年級皓社，美國麻省理工學院MIT及史丹福大學電機工程學士及碩士學位。

許氏家族熱心教育，設有教育基金。

許晉義校友對培正母校事工一向十分支持.

魯重賢　培正1954年級匡社，曾就讀於武漢大學、香港大學、浸會大學、加拿大Queens University數學博士及美國麻省理工學院物理學博士。曾任職美國貝爾實驗室。嗣後長期從事檢討〈相對論〉正確性的 究，發表有關論文百餘篇，最近終於取得突破性進展。

Comments on "Albert Einstein - Greatest Brain of the 20th Century Documentary"

C. Y. Lo and Richard C. Y. Hui
The Applied and Pure Research Institute 15 Walnut Hill Rd., Amherst, NH 03031

Einstein is a theoretical physicists that nobody can ignore in modern physics. He is the original author of special relativity [1] that replaces Newtonian spacetime, established a formula for energy and mass, i.e. E = mc2. He is also the author of general relativity [2] that predicts the bending of light rays, establishes time dialation and the space contraction.

Moreover, he proposes the notion of photons for quantum mechanics [3]. However, he assumes the photons are massless particles, but failed to see that the energy-momentum tensor of massless particles alone is incompatible with the energy-momentum tensor of an electromagnetic wave [4]. He also did not see that there are at least two kind of energies. One kind is associated an energy-momentum tensor with non-zero trace such as the mass, and another kind is associated with a zero trace energy-momentum tensor such as the electromagnetic energy. 1)

In fact, the energy-momentum tensor of massless particles T(p)ab is a sum of the energy-momentum T(w)ab of the related electromagnetic wave and the energy-momentum tensor T(g) ab of the related gravitational wave. 2) Since the energy of massless photons is equivalent to mass, we have E(w) + E(g) = mc2. This is why Einstein failed to prove E = mc2 as generally true [7].

Moreover, Einstein's thought experiment can be misleading 3) since experiments show that the weight of heated-up metals has reduced instead of what Einstein predicted [8]. Consequently, we have confirmed the existence of the repulsive gravitation and the unification of gravity and electromagnetism [9]. It follows that the 1965 proof of Penrose on the existence of black holes is invalid 4) because an invalid assumption has been used [10]. Apparently, Penrose and Einstein do not understand the principle of Causality adequately and thus they accepted the unbounded solution of Penrose as valid in physics [11].

The Nobel committee also are not aware that the metals can have reduced weight after heated up 5) as shown by Dmitriev, Nikushchenko, & Snegov [12] in 2003, and in 2010 by Fan Liangzao, Feng Jinsong and Liu Wu Qing [13] measured another set of metals, their weights also reduced as the temperature increased, but they also mistaken these as a reduction of mass. Recently H. Y. Woo [14] has measured a number of metals after heated-up, and conclude also that the repulsive gravitational force does exist. 6)

Now, it is clear Einstein not only make mistakes and wrong conclusions, but also leads the wrong practice of misleading thought experiments. Since he failed to see the existence of repulsive gravitation and establish the unification of gravitation and electromagnetism, although Lo has justified this unification, it is difficult to regard that Einstein has the greatest brain in the 20th Century in sciences.

Moreover, the Einstein equation do not has any dynamic solution [15] for even a two-body problem, and thus the principle of causality is violated, and his covariance principle has been shown as invalid through explicit examples [16] as pointed out by Zhou Pei-Yuan [17] in 1983. This shows that theorists, including Einstein, still do not understand general relativity fully as pointed out by Gullstrand [18].

We will answer questions for Pei-Ching Alumni if they put their questions in writing and send to us. This is necessary because many of the prominent theorists in general relativity often make mistakes without knowing them. Thus, a difficulty in understanding general relativity is not only that the related mathematics is rather difficult but also that many relativists often inadvertently use invalid but deceptive arguments instead of mathematics because of their inadequate back ground in pure mathematics, Also, mathematicians made mistakes, but did not know their mistakes because they do not understand physics.

For instance, S. T. Yau in their positive mass theorem [21] claimed that general relativity is almost perfect. However, he cannot provide an dynamic solution to support their claim. The Wheeler School often uses invalid arguments to make claims that violate the principle of causality. They even rejected the correct criticisms of Volker Perlick [22, 23]. Note also that

Einstein's derivation on the remaining perihelion of Mercury is defective [18]. This is why Einstein did not get a Nobel Prize from his general relativity.

In the past, the errors in general relativity was overlooked due to the prestige of Einstein. Now, since Einstein also can be wrong, we should not hesitate to recognize other errors in general relativity. Einstein claimed that he has no special talent but very very curious. However, in my opinion he is smart and talented. Nevertheless, he curious has never led him to wonder why gravity was always attractive. Thus, he failed to see the repulsive gravitation and to establish unification between gravitation and electromagnetism.

Einstein had also said "The most important thing is to not stop questioning." A problem is that Einstein questioned everybody, but seldom to question himself. In other words, like many great men, Einstein only paid lip service to self-criticism. It is clear that if he had questioned himself more often, he would have made fewer mistakes.

Endnotes:

1) It is a special property of Maxwell's theory that the electromagnetic energy is associated with a traceless energy-momentum tensor. Einstein seems to forget this property for the Maxwell's electromagnetic theory.

2) Einstein had mistaken that the photons were only quanta of electromagnetic energy [3] since in 1905 Einstein had not proposed general relativity yet.

3) Einstein's thought experiment was considered a "great" invention of Einstein because it save many trouble of details for a real experiment. Nobody recognized its shortcomings because theorists such as Witten advocated incorrectly that the most important a theory in physics was self-consistence. This problem was not discovered by physicists until the repulsive gravitational force was discovered.

4) The notion of black holes has a long history of its own, it was a popular speculation since we obtained the Schwartzschild solution. In particular the Wheeler School [19] is in favour of black holes but abandoned Einstein's equivalent principle. Thus, the Wheeler School failed to see the existence of an repulsive gravitational force because they incorrectly believed that E = mc2 could be generally true.

5) The Nobel Prize Committee of physics was dominated by the Wheeler School [19] who do not understand mathematics. This is why this committee have made mistakes in gravitation [20].

6) Woo belongs to a group of the few theoretical physicists that have broken through Einstein's error.

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An Open Letter to the Physics Department of MIT

by C.Y. Lo (1954 匡社)

Professor Deepto Chakrabarty, Head, Department of Physics, MIT c.c.: Research Vice-President, Zuber@mit.edu; cubstead@mit.edu;

Dear Professor Chakrabarty:
I graduated from MIT in 1977 with a D.Sc. degree in theoretical physics, Before this, I have a Ph.D. degree in pure mathematics under Professor I. Halperin from Queen's University Ontario, Canada. I learned pure mathematics because I have determined to be a theoretical physicist, and I also know that the mathematical training from physics would be inadequate to do research in some areas of theoretical physics.

This is confirmed in the field of gravitation since everybody including Einstein, made mathematical mistakes in general relativity. In particular, the well-known Wheeler School even made many mistakes in mathematical without being known by the scientific community. This a reason that some aspects of general relativity is currently in such a poor state. Although I am known by the physics department to do excellent calculations in physics in MIT, my specialty was not gravity. However, I was very lucky to have the best teacher in gravitation, Prof. S. Weinberg, and an excellent consultant in gravitation, MIT Institute Professor P. Morrison. These made me to have the ability to do research in gravitation after my graduation. Currently, it were believed that Einstein's major achievements are the formula $E = mc^2$ and the Einstein equation. Thus, there are memorial and the Einstein equation. Thus, there are memorial buildings in Beijing, Taipei, and Berlin because Einstein and his followers did not know that these two achievements are not consistent with each other. In other words, the mistake is universally made by everybody, including MIT. As a graduate of MIT, I feel that I have the obligation to tell you this error because you are our department head.

Moreover, this mistake also leads to overlooking the important repulsive gravitational force, which most physicists still do not know. Einstein believed $E = mc^2$ is generally true because he failed to see there are at least two kinds of energies; one is related to a non-zero trace energy momentum tensor, and another is related to a traceless energy momentum tensor such as the electromagnetic energy. Moreover, Einstein is clearly wrong because experimentally a heated metal would have reduced weight instead of increased weight as Einstein predicted. In addition, the photons as massless particles includes not only electromagnetic energy, but also gravitational energy. Einstein also makeother errors without being well-known. For instance, his covariance principle is invalid as Prof. Zhou Pei-Yuan pointed out and I support this with explicit examples.

Two years ago I went to Hong Kong and reported the news of the repulsive gravitational force being discovered to Pui-Ching high school. Now. they are very interested in repulsive gravitation and asked what is MIT attitude toward my discovery. Thus, I have no choice but to ask you to tell them your attitude. They would have a conference around August. I hope that you can give me an answer before then. Nevertheless, I do expect that you would have the right conclusion that E = mc 2 is not generally valid, and the repulsive gravitational force does exist. Moreover, Mr. H. Y. Woo has published, "Is Einstein's Equation E = mc 2 always correct?" to Hong Kong Institution of Engineers (HKIE), which is a HK government recognized organization with 30 thousand professional engineers of various disciplines such as Mechanical, Electrical, Electronic, Civil. Marine, ect. .

For you convenience, my related paper is attached for your perusal. Any comments and suggestions you may have will be appreciated. Thank you. I would like to tell you also that the MIT support of my work is very limited. So far, I have only the support of Prof. Susan Hockfield and partial support from Prof. Frank A. Wilczek. It was a surprise that Einstein had made so many errors without being known.

Sincerely yours,
C. Y. Lo, 77 Physics.

編者按：

培正1954年級匡社魯重賢同學最近給麻省理工學院 (MIT) 物理學系發表了一封公開信，報告他作為校友近年研究工作的狀況。

由於他的雙重校友身份，因此他申請在《培正同學通訊》刊登此公開信，這對校友情況交流是很有裨益的！