

**FIFTH IMSA CONVOCATION**  
**Monday, August 27, 1990**  
**Fermi National Accelerator Laboratory**  
**7:30 o'clock**

- I. OPENING SELECTIONS**
- II. PROCESSIONAL**
- III. DR. KEN STANFIELD, Deputy Director, Fermi**
- IV. DIRECTOR'S WELCOME**

**A very special good evening to you--on behalf of the staff, I want to welcome our juniors and seniors back--it's good to see you again, and a special greeting to our new students, the Class of 1993. We're delighted to have you join the IMSA family and your new home.**

**As you know, the Academy has strong ties to Fermi National Accelerator Laboratory, beginning with the guidance of Leon Lederman as Director of Fermi. Dr. John Peoples is the present Director of Fermilab, and in his absence it is a pleasure to introduce Dr. Ken Stanfield, Deputy Director.**

**Thank you Dr. Stanfield.**

**This is the fifth time the Academy community has assembled for a convocation, and it is always a special time. A convocation represents a coming together--a formal calling of a community, and a time for reflection and celebration.**

**We begin our academic year in this way to symbolize our commitment to scholarship and to celebrate our common bond--the love of learning and the joy of discovery.**

**This night is also special because it represents the beginning of a refocused journey in the life of the Academy.**

**On June 11, the Board of Trustees formally approved the Academy's bold and visionary strategic plan; a plan that will restructure our Academy to achieve extraordinary purpose.**

Although we have come through some significant challenges over the last five years, our commitment to recreating our institution will have profound changes on how and what we teach, and how and what you learn. I, and others, will meet with each of your classes to discuss the impact of the Strategic Plan in greater detail. But tonight is a parenthesis, a time to remember, celebrate, and reaffirm why it is that we all came here, and why it is that we all stay.

And we do this within the context of our gratitude to the shareholders of Illinois who continue to support this institution, and you as students.

**V. MARK WU, STUDENT COUNCIL PRESIDENT**

It is now a pleasure to introduce Mark Wu, Student Council President.

**VI. MUSICAL SELECTION -**

**"JUST A CLOSER WALK" - D. Gillis**

**VII. INTRODUCE DR. EDWARD, "ROCKY," KOLB**

**It is both a privilege and a pleasure to introduce our keynote speaker this evening, Dr. Rocky Kolb.**

**Dr. Kolb is head of the NASA/Fermilab Astrophysics Group at Fermi National Accelerator Laboratory. He is also a member of the faculty of the The University of Chicago, where he is Professor of Astronomy and Astrophysics, a Professor in the College, and a member of the Enrico Fermi Institute.**

**Dr. Kolb received a Ph.D. in theoretical physics from the university of Texas in 1978, and did his postdoctoral research at the California Institute of Technology, the Institute for Theoretical Physics at the University of California in Santa Barbara, and at Los**

**Alamos National Laboratory where he was the J. Robert Oppenheimer Research Fellow.**

**Dr. Kolb shares his knowledge and expertise through the more than 100 published scientific articles, and two books on particle physics and cosmology he has authored.**

**He is also no stranger to high school students, and has participated in Fermilab's Saturday Morning Physics Program and the programs of the Corridor Partnership for Excellence in Education.**

**The major area of Dr. Kolb's research is the application of particle physics to cosmology and astrophysics. Most of this work has involved the study of the very early Universe--inflation, dark matter, limits on particle properties, baryogenesis, phase transition, and axions, etc.**

**An additional area of activity and great interest is science education; and this activity includes writing and lecturing on cosmology.**

**We are honored and privileged to have Dr. Kolb with us.**

**Would you please join me in giving a warm welcome to Dr. "Rocky" Kolb. . .**

**( K E Y N O T E   A D D R E S S )**

**Thank you, Rocky.**

**Dr. Kolb has presented us with some very provocative insights about science and being a scientist, the challenges for understanding you face, and the opportunities you have for future**

discovery. In using the story of Albert Einstein to demonstrate the triumph of the human spirit, clarity of scientific, physical, and the unquenchable desire to understand the elusive secrets of water, he presented you with a challenge and a responsibility --to question--to explore--to imagine--and to dream, knowing that the greatest discoveries cannot, and never have been anticipated. I hope you consider that challenge thoughtfully because that represents the essence of what the Illinois Mathematics and Science Academy is all about.

Let me conclude this Convocation of 1990, by placing the value of science, creativity, exploration, discovery, and intellectual pursuit within a special context of ethical, socially responsible and moral behavior; because this will be our focus and commitment this year.

**Our responsibility as members of this community of scholars is to develop not only academic and intellectual skills, but habits of mind, heart, and behavior that build character and promote leadership within the framework of responsible living in and contributing to, this environment and ultimately our planet.**

**Aristotle asked, "How does a man [or a woman] become virtuous?" And he answered, "We become just by performing just actions; self controlling by exercising self control. We become virtuous by performing virtuous acts."**

**Let me state as clearly as I can, lest there be any doubt...If you believe that the only thing the Academy values is academic excellence, you are sorely mistaken. If we had to choose, there is no question it would be on the side of developing moral, ethical, responsible, and caring individuals.**



**Robert Coles, a noted psychiatrist from Harvard University and a scholar of moral development, said that character and intellect are by no means the same. We can be smart without necessarily being good...knowledge without moral wisdom is empty.**

**We are privileged to be part of this institution, and as members of this community, capable of achieving the knowledge of the universe, we must embody the highest standards of ethics and integrity, and these two behavioral values are best developed when we work together in an atmosphere of support, respect and caring for one another.**

**We have established a task force on ethics this year. Mr. Court will serve as Chair; and we will solicit your insights, perceptions, and active participation as we work together to ensure that your success and the success of the Academy is rooted in the highest standards of honesty and integrity, because**

**in the final analysis, our life will not be judged by our academic accomplishments, but by who we were, the kind of life we choose to live, and by what we have done to enhance the quality of life.**

**Godspeed, and my best wishes for an honorable and successful year.**

**Last year a very sad and unfortunate incident happened the night before graduation; some members of the graduating class were removed from our ceremony because they had participated in theft.**

**Although we had physically removed their chairs, their absence and our loss and disappointment were deeply felt by the graduates and the staff.**

**I share this incident and our renewed commitment with you on a night like this, not to diminish our celebration and our sense of excitement at the beginning of a new year, but rather to underscore that what we celebrate must be more than academic achievement.**

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