

”WHY SHOULD WE CHOOSE STEM FIELDS?”

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”GLOBAL WOMEN’S EMPOWERMENT CONFERENCE”

MLK Lounge, Hale Hall, OSU

March 3, 2019

Organizers: Advocates for the Women of the World (AWOW), BUCK-I-SERV, Office of Student Life MCC

STEM: SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS

- Why choose STEM fields?
 - They are part of life, needed for advances for humanity, for survivability
- Why females?
 - Half of the population - half of the intellectual power to make advances
- Women and girls are under-represented in the sciences. UNESCO Data: Less than a third of all female students choose STEM-related subjects in higher education
- Should we waste our intellectual power?
 - NO!



Dinosaurs ruling the earth: 65M years ago

Asteroid impact depleted them



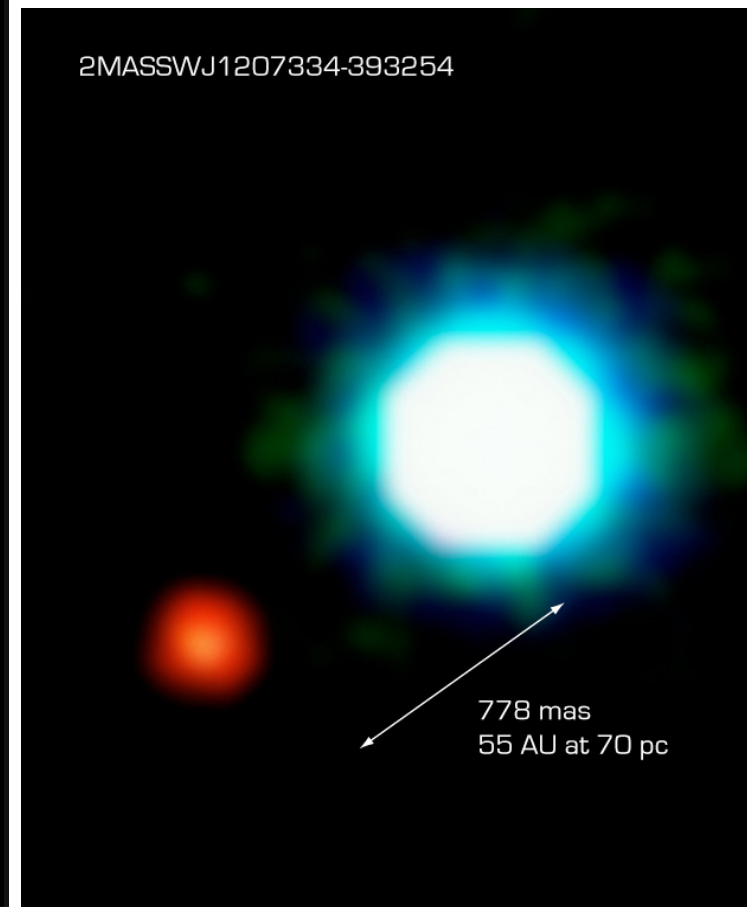
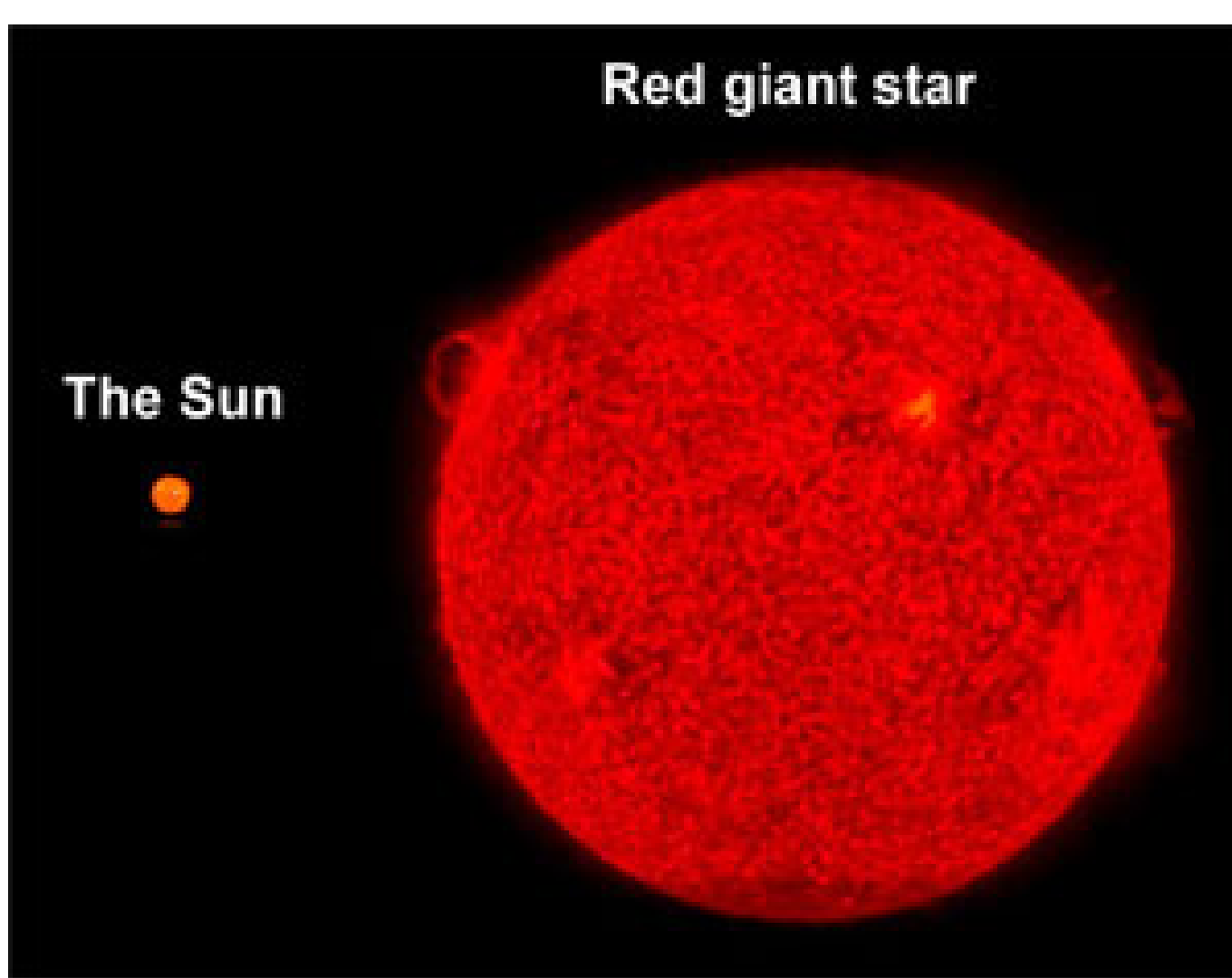
OUR IDEAS FOR SURVIVAL: LASER TRACTOR BEAM FOR DEFLECTION OF THE ASTEROID (STAR TREK)

- Requires much scientific advances for such a beam

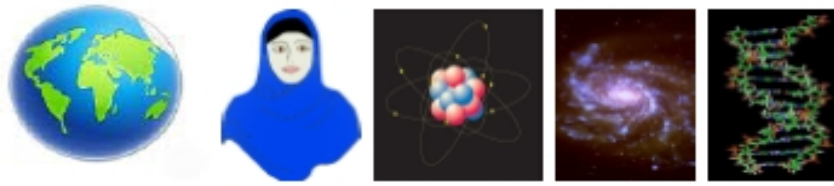


LIFETIME OF OUR SUN: SEARCHING FOR A HOME

- Sun's fate after 6-7 billion years - Red Giant which will engulf all planets. **We need to survive.**
- Searching habitable exoplanets - expect to have 11 Billion planets in our galaxy - Milky Way.
- With current technology a spacecraft will take 18 thousands years to reach the nearest star Proxima a



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



INTERNATIONAL SOCIETY OF MUSLIM WOMEN IN SCIENCE (ISMWS)

ISMWS CHARTER

Founder: Dr. Sultana N. Nahar

The Ohio State University, Columbus, Ohio, USA

April 19, 2010

- **AIM:** - encourage Muslim women in science profession, form a network for various support
- **Objective:** Stay in Science (basic or applied)
- **Motto:** Out of 24 hours a day, we keep some hours for our intellectual nourishment
- **Members:** Over 270 from 30 countries

Web: <http://www.astronomy.ohio-state.edu/~nahar/ismws.html>

For membership (free) - Email: nahar.1@osu.edu

Notes from ISMWS Charter:

- Each of us, male and female, have biologically the same brain and the same capability to understand the amazing mysteries of nature, finding out the laws that govern them and implement them for our benefits and advancement. Even if we use our brain continuously, we would probably use only 10-15% of it
- No religion restricts a person from learning, gaining knowledge. Knowledge is a necessity. Islam encourages knowledge for both man and woman.
- All living forms, the world we live in, the universe around us have been created not to ignore them, but to know them for our purposes
- The more we know the universe, the nature, the human functions, living beings, the more beauty we see, the more power and control we achieve to solve problems, the more we admire Allah and His creations

THE LONGEST RUNNING UNIVERSITY



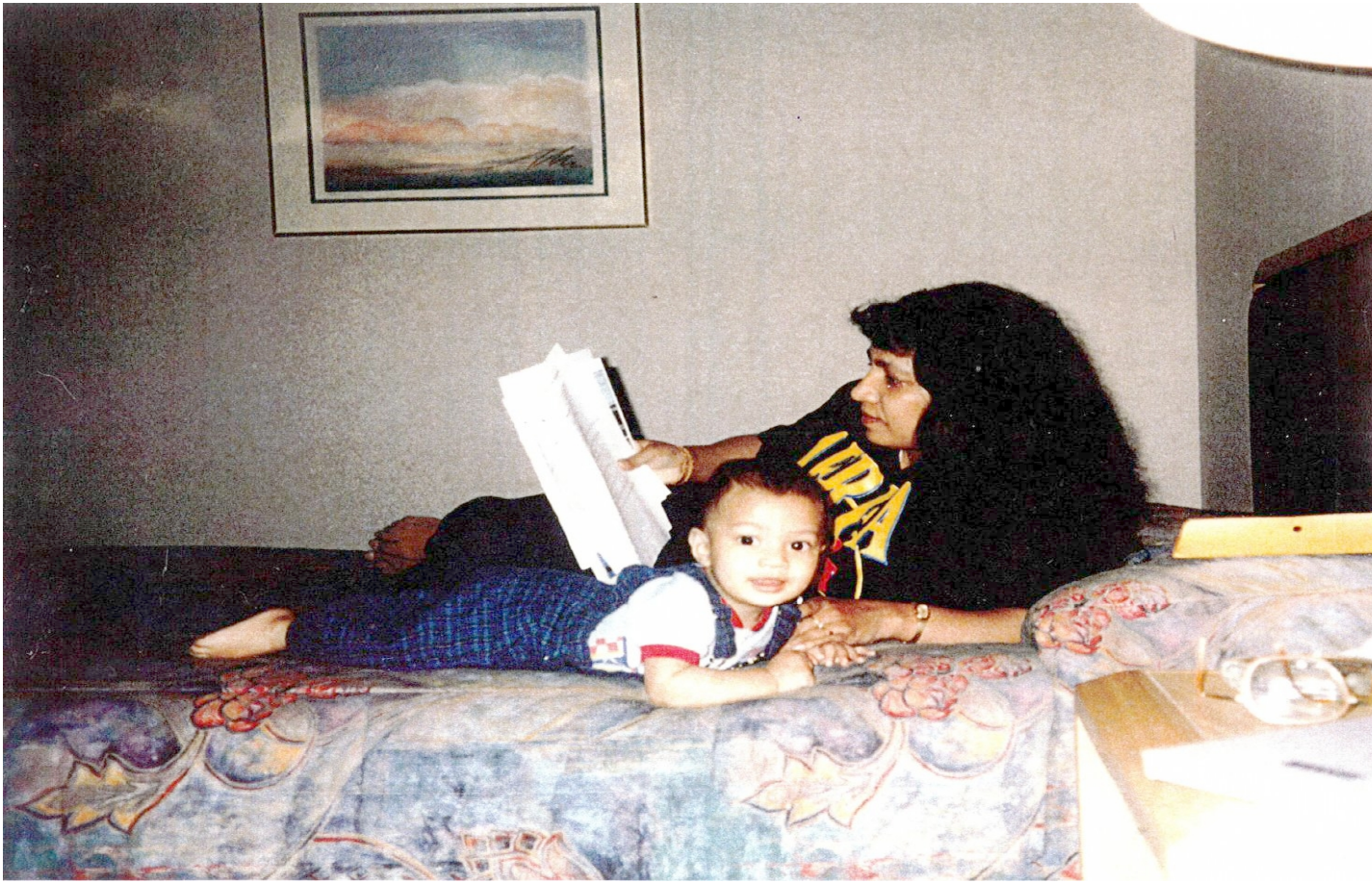
Universit Al Quaraouiyine founded in 859 in Fez, Morocco is the oldest existing, continually operating and the first degree-awarding educational institution in the world (UNESCO and Guinness World Records[5][6])

- It was founded by Fatima al-Fihri (female)

STEM: Different from other subjects

- General assumption: Science is not easy
 - Remember: Nothing worth comes easy
- STEM needs thinking, concentration and perseverance
- Book says: Make effort - one credit, Success - two credits
- Face the challenge - hit the boundary of your talent and power

Pic: Sultana & son in a conference hotel room



ISMWS

- Family is very important for us. Taking care of a human being is far more difficult job than anything else, because each human mind thinks independently and hence can always oppose to what you think. Taking care of a family can be most challenging and also be the most rewarding. However, each of us need to nurture and utilize our intellectual power. We need support and time to detach. Detachment is needed for any thoughtful work.
- We must adopt to ignore hostile and non-supportive comments, and put downs by fellow students, friends, and others. As my father said that it is important to "Remain focused to your goal, and do not get distracted by the minor problems. They become insignificant with achievement."
- Make a practice: "I will keep at least two hours every day for my science regardless what part of the day"
 - Average: 8 hours of sleep and rest, 8 hours for various chores, use 2 hours of science out of this 8 hours.
- Get part of any useful society, organization. You may find many benefits from it

OUR PRACTICE

- For the sake of dignity and of your own stand, make a practice of
- Always help or support, regardless of your opinion, a person if he or she is doing something productive
- Make only positive comments about Islam and Muslims
- If you have zero comment, remain quiet. Do not initiate anything
- If you have a negative point to make, be patient and quiet
- There are plenty of people out there to make negative statements
- If you think supporting others against your own kind will do justice - know that it will not work, it may end like "digging your own grave"
- Remain united and promote each other
- Live respectfully with diversity & keep your own identity
- May Allah bless us all!