

# Qomrah Project

**Hanin Aqrabawi**

**LAMBDA Physics Group**

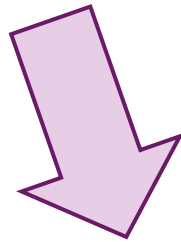
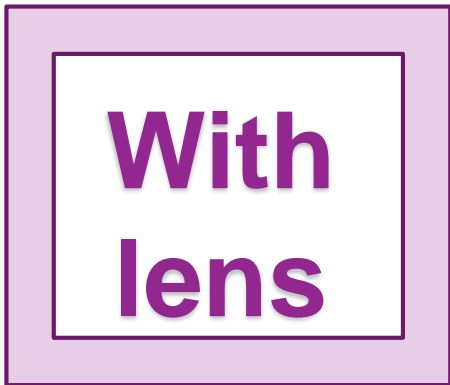
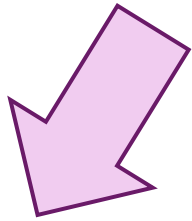


**INTERNATIONAL  
YEAR OF LIGHT  
2015**

# Stages

1. Portable Camera Obscura.
2. Transforming a Room into Camera Obscura.
3. Qomrah of Ibn Al-Haytham on the Top of Physics Building.

# Portable Camera Obscura



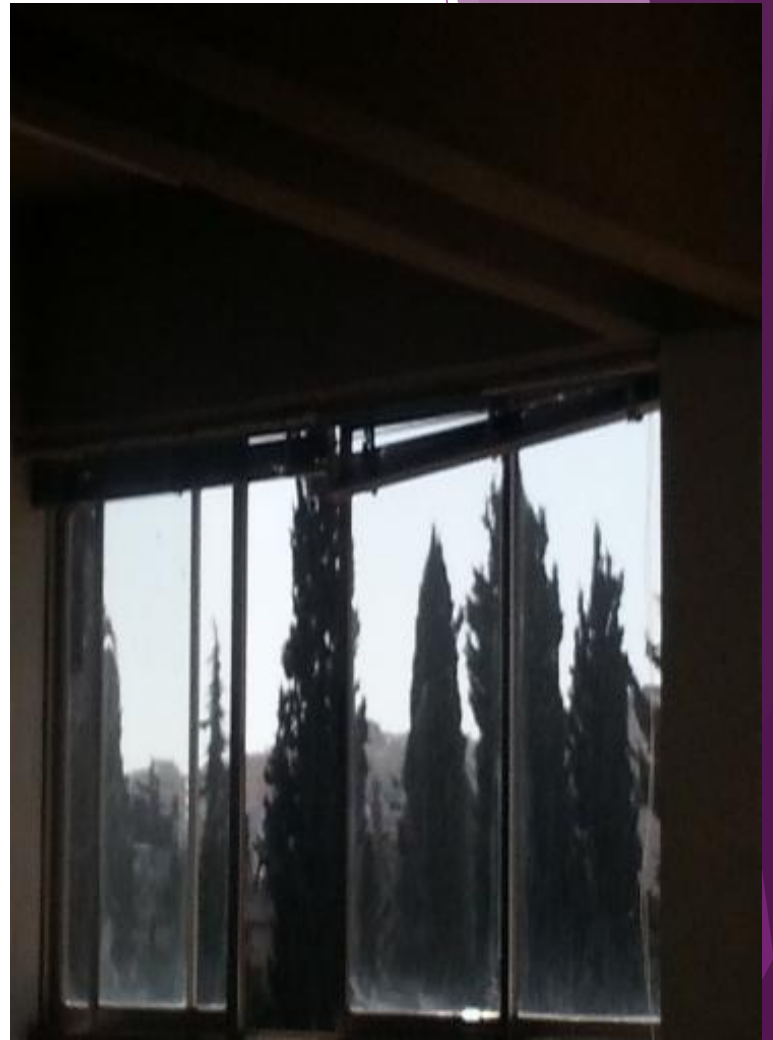
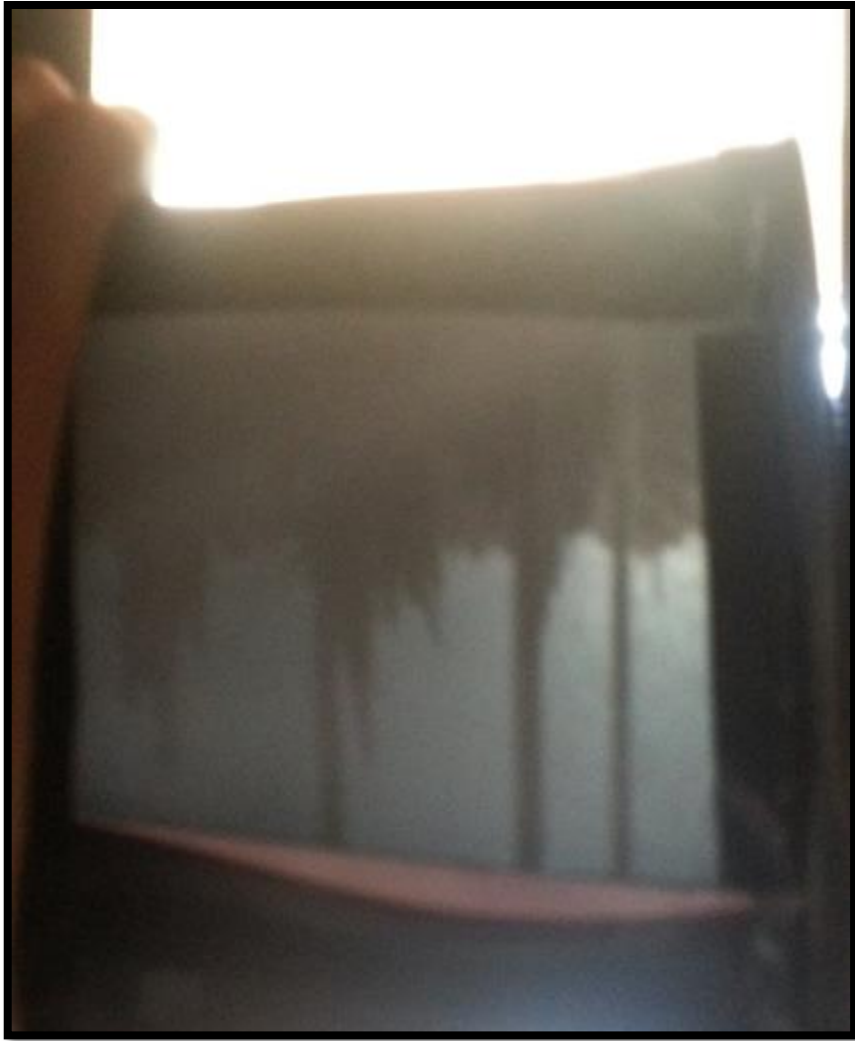
# Without lens





# With lens













# Transforming a Room into Camera Obscura

## Al-Hasan Ibn al-Haytham "Father Of Optics"

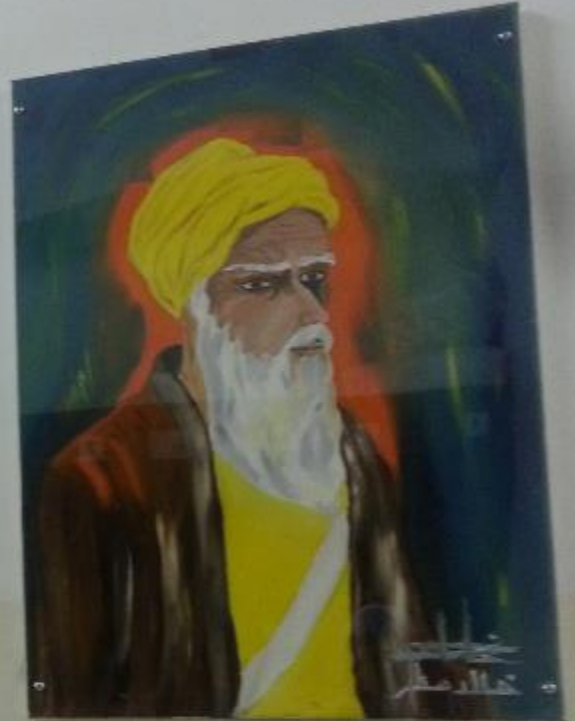
- \* An Arab physicist, mathematician, astronomer, and engineer.
- \* UNESCO has declared 2015 the International Year of Light, celebrating Ibn Al-Haytham's achievements in optics.
- \* Most famous contributions: Kitab al-Manazir (Book of Optics), Visual Perception, Camera Obscura "the dark room", Scientific Method.

الحسن ابن الهيثم

\* عالم عربي برع في الفيزياء والرياضيات والفلك والهندسة.  
\* أعلنت الجمعية العامة للأمم المتحدة عام ٢٠١٥ السنة الدولية للضوء.  
\* احتفالاً بمرور ألف عام على تأسيس علم الضوء العربي الذي وضعه قواعد ابن الهيثم في كتابه في علم البصريات كتاب المناظر.  
\* أصبح لمساهماته الفريدة على الإصرار ووضع قواعد المنهج العلمي.



مختبر الحسن بن الهيثم  
Ibn Al-Haytham Lab.



مختبر الحسن بن الهيثم  
Ibn Al-Haytham Lab.

Optics), Visual Per  
room", Scientific M





القُمرة  
Camera Obscura















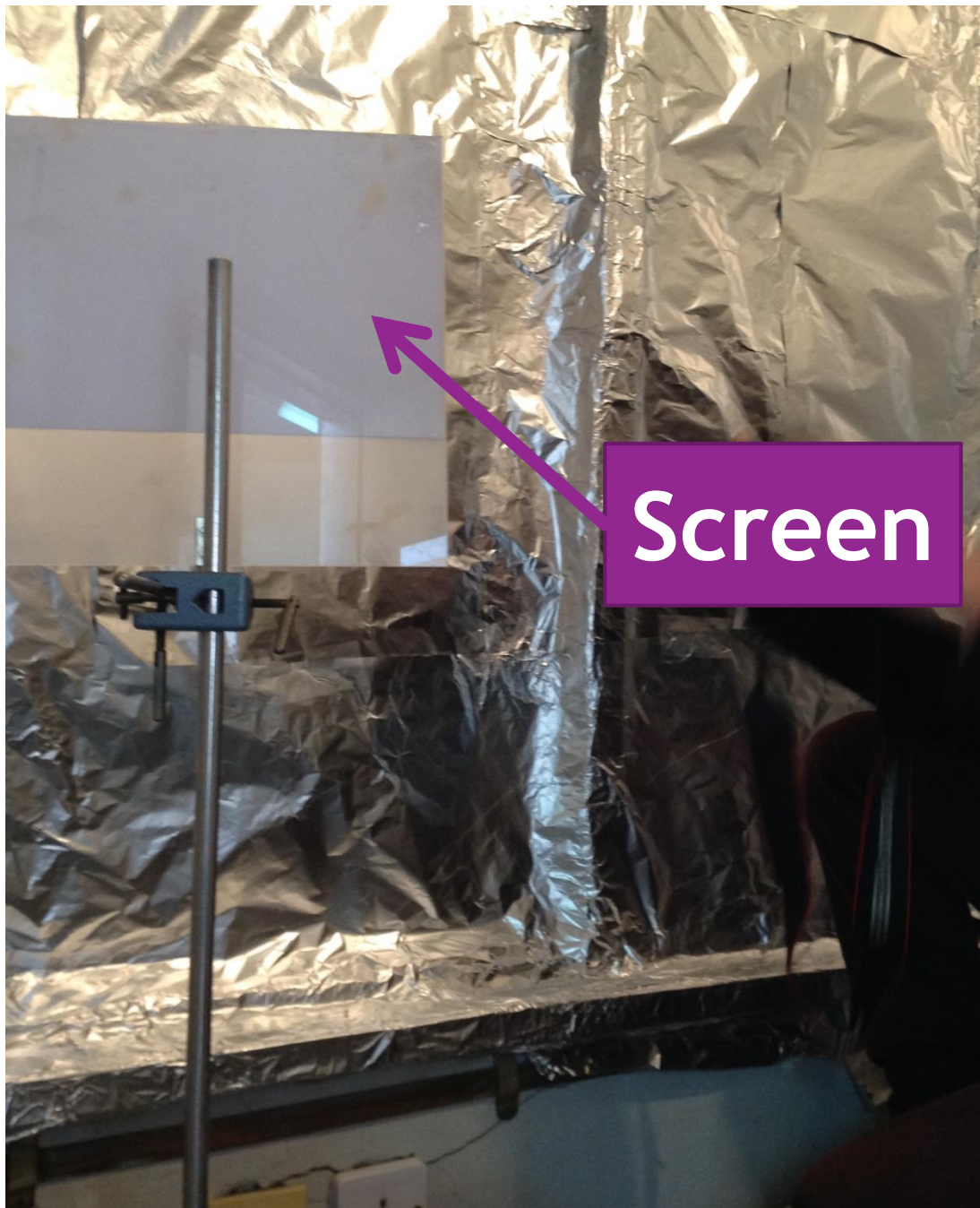






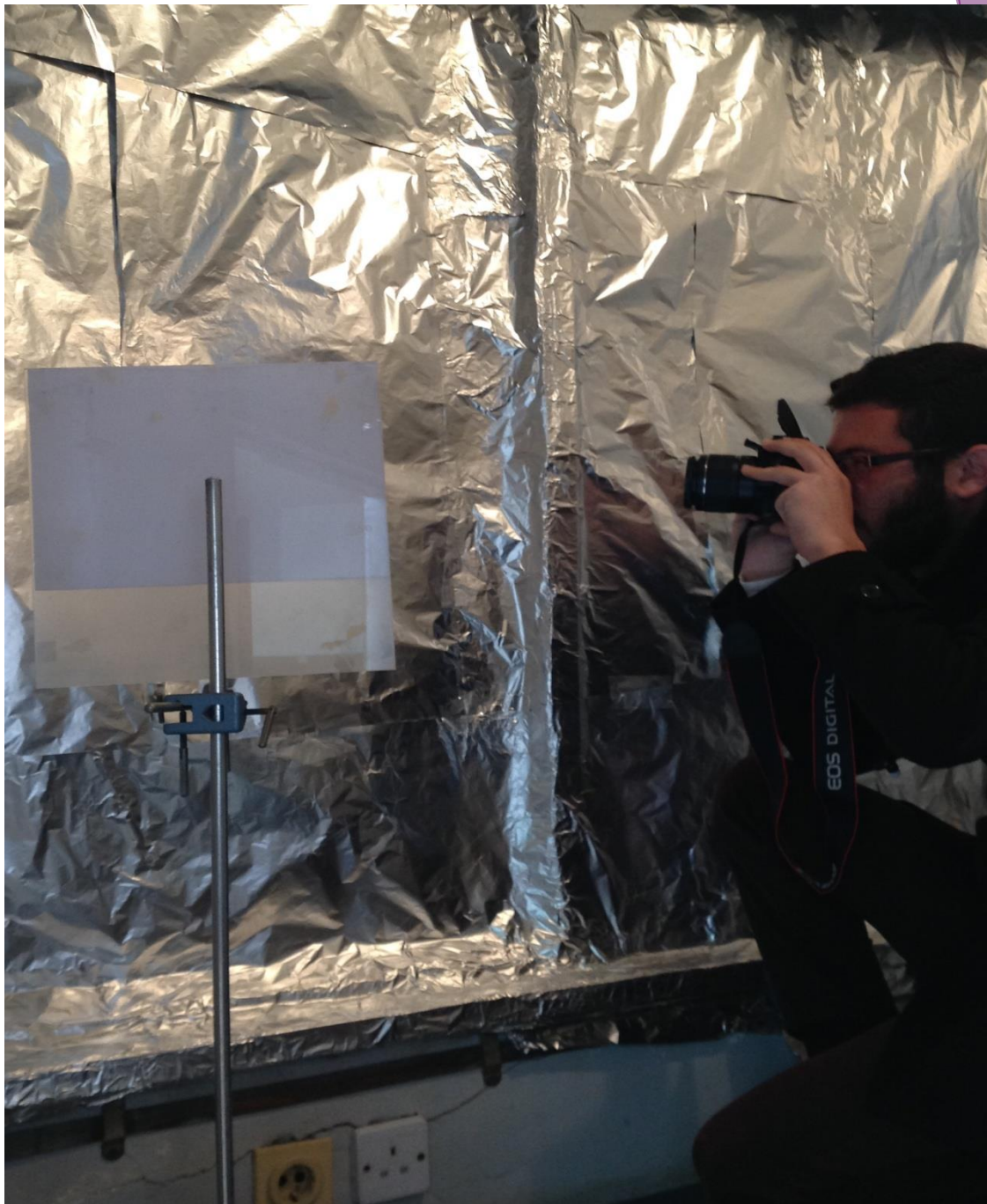






Screen





## Problems & Difficulties in Location of this Room

- Located at the corner of the lab.
- Might be taken back for experiments.
- The only room in the lab that contains a window.
- The view from this window is blocked by the Physics Building.
- The image can be hardly collected for a short time before sunset.

The background features abstract, overlapping purple geometric shapes, primarily triangles and polygons, in various shades of purple, creating a modern and dynamic visual effect.

# Our Ultimate Goal

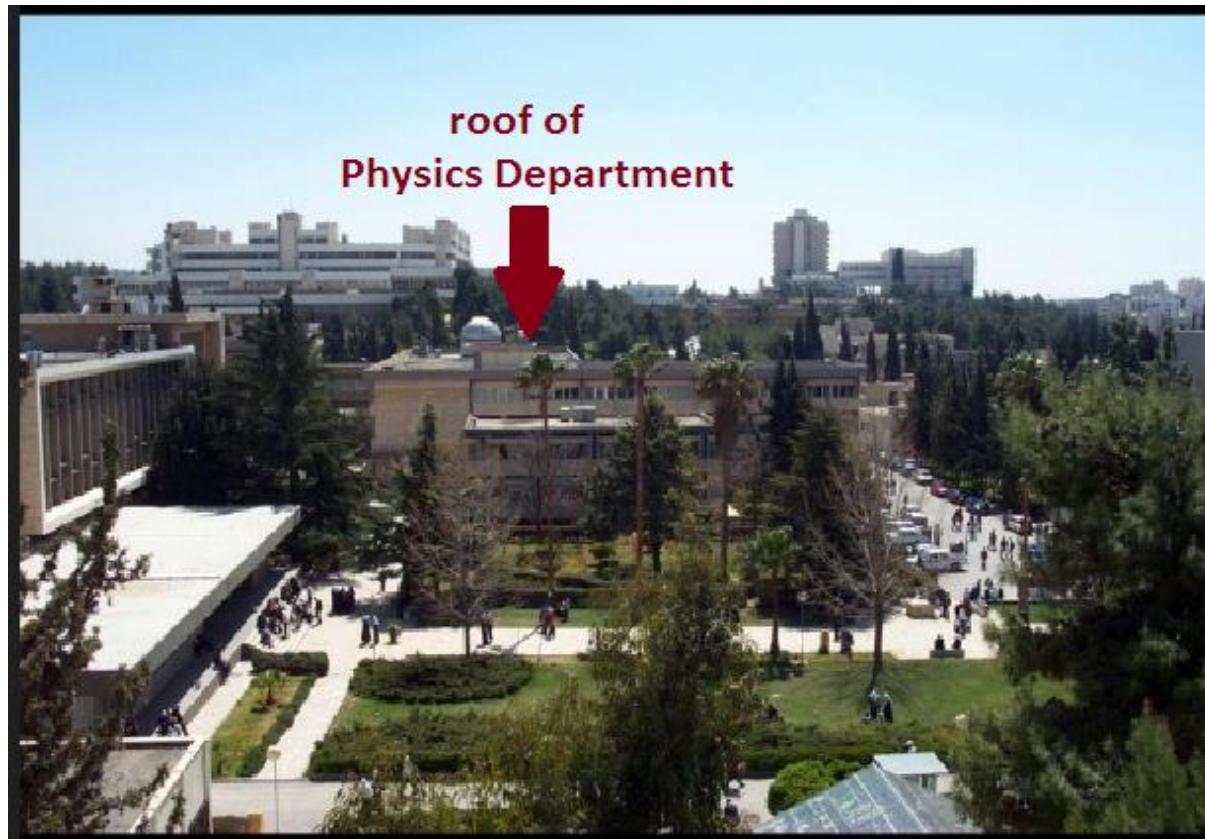


# **Qomrah of Ibn Al-Haytham on Top of Physics Building**


# Stages of Building Qomrah on the Top of Physics Department



# 1. Approval of Buildings Department



## 2. Tentative Design & Proposal

|  |   |                          |                          |                          |   |                          |
|--|---|--------------------------|--------------------------|--------------------------|---|--------------------------|
| الجامعة الأردنية<br>عمادة البحث العلمي<br>مجلس البحث العلمي<br>نموذج رقم 1 - د - ف |   |                          |                          |                          |  |                          |
| Date: .....  |   |                          |                          |                          |   |                          |
| No. of manuscript  |   | ----- - ----- - ---      |                          |                          |   |                          |
| Title of published chapter   |   |                          |                          |                          |   |                          |
| Reviewing the manuscript of published chapter                                      |   |                          |                          |                          |   |                          |
| Elements of reviewing  |   | 20%                      | 40%                      | 60%                      | 80%   | 100%                     |
| 1.   | How much did the published chapter add to academic knowledge                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 2.   | To what extent did the author succeed in presenting the published chapter in a full and clear way | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 3.   | The need for the information that the published chapter presents                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 4.   | Academic/ Scientific/ Language mistakes   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 5.   | Will the published chapter attract a wide base of interested people in its field                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 6.   | The extent of using Graphics and illustrations (if available)                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> |
| 7.   | Is the published chapter presenting the mean  | —                        | —                        | —                        | —   | —                        |

# 3. Research Project Fund for Undergraduate Students (??)

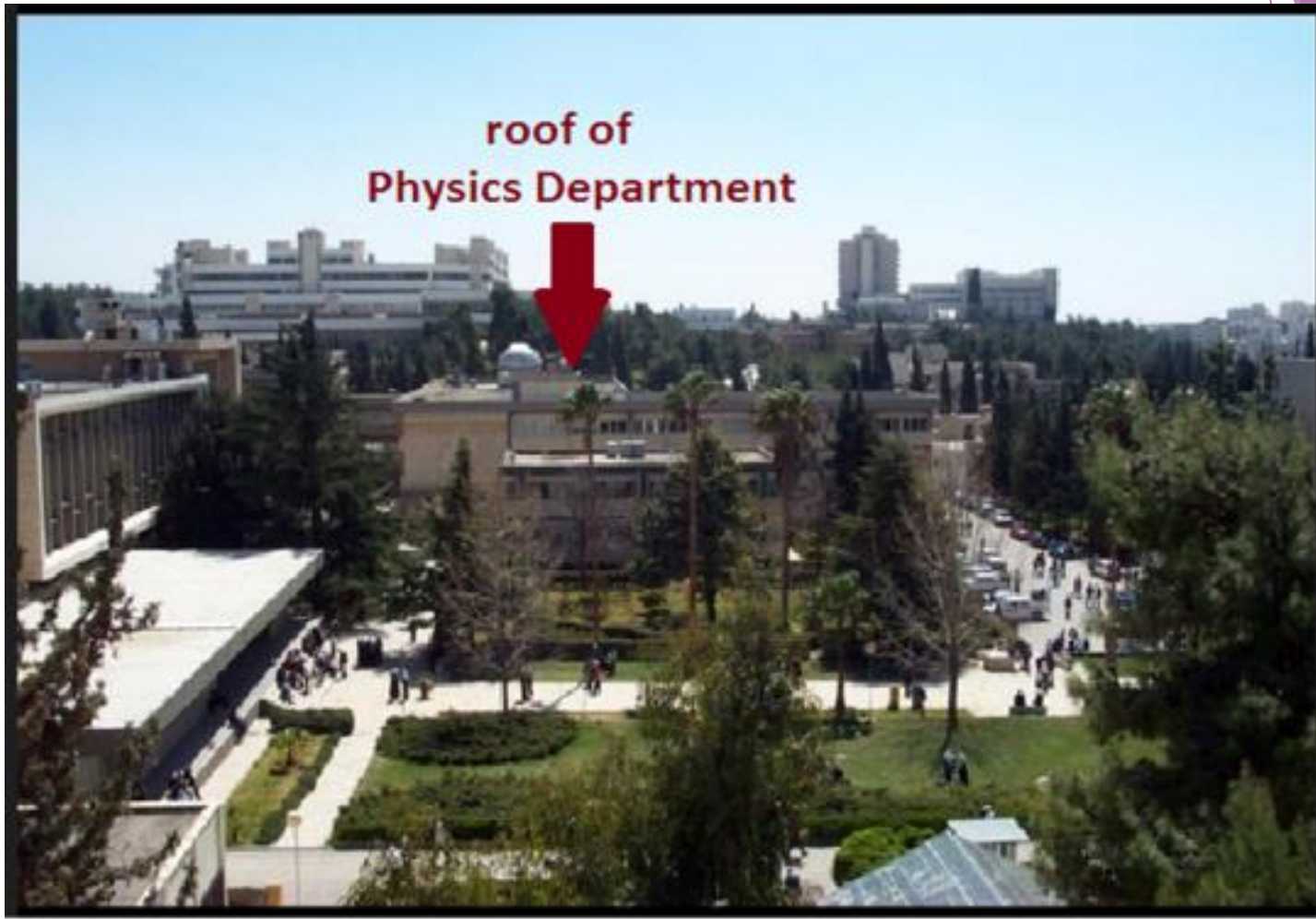


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# To Start Working

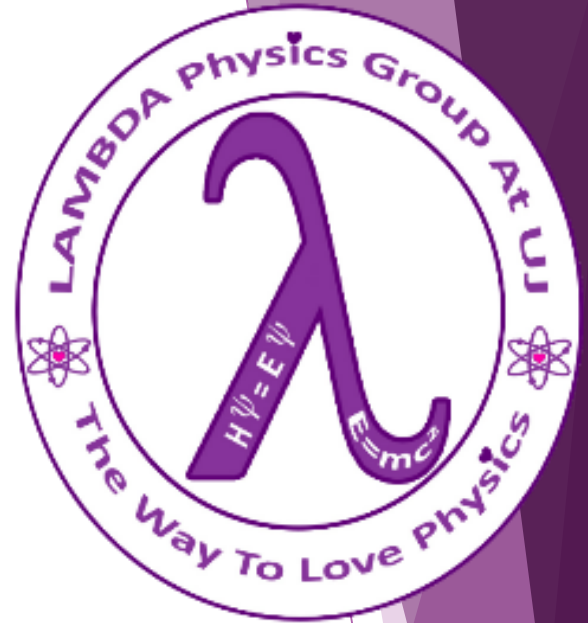


# Suggested Location



# Team Work

## LAMBDA Physics Group



- The door is open for any *hardworking dedicated physicist* or *physics lover* to be actively involved in Qomrah project.

# Support of..

- Department of Physics
- Deanship of Faculty of Science
- Deanship of Scientific Research
- Private Sector

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# Thank You