PMF – established in 1946 – one of the largest members of the **Zagreb University**, which comprises 29 faculties, 3 art academies and the Centre for Croatian Studies

The University has its roots in the 17th century, when king Leopold the 1st introduced high-schools studies in Zagreb. The modern University was founded in 1874 by the decree of the Croatian parliament.
### Faculty of Science & Math

#### Table: Number of Employees and Total Workspace Surface

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of</th>
<th>Total workspace surface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>employees</td>
<td>students</td>
</tr>
<tr>
<td>CHEMISTRY</td>
<td>111</td>
<td>600</td>
</tr>
<tr>
<td>GEOPHYSICS</td>
<td>32</td>
<td>81</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>101</td>
<td>850</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>98</td>
<td>1,594</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>198</td>
<td>1,003</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>49</td>
<td>300</td>
</tr>
<tr>
<td>GEOGRAPHY</td>
<td>36</td>
<td>430</td>
</tr>
<tr>
<td>DEAN’S OFFICE</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>659</td>
<td>4,858</td>
</tr>
</tbody>
</table>

On average, 900 students enroll each year

#### Teachers and Scientists:

**Total: 408 (230 PhD)**

- 79 full professors
- 48 associate professors
- 87 assistant professors
- 194 assistants

- Botanical gardens
- Croatian Seismological Survey
New Study programs
Harmonized with the Bologna declaration (3 + 2 + 3 year-scheme)

• Undergraduate research programs (6 semesters, 180 ECTS)
  – lead to a professional bachelor degree (Baccalaureus)

• Graduate research programs (4 semesters, 120 ECTS) &
  Integrated graduate research studies (10 semesters, 300 ECTS)
  – lead to a professional master’s title (Magister)

• Integrated graduate educational studies (10 semesters, 300 ECTS)
  – lead to an educational master’s title (Magister educatio)

• Postgraduate (doctoral) studies (6 semesters, 180 ECTS)
  – lead to a PhD (or Dr. Sc.)

We also offer interdisciplinary programs
(e.g. Environmental studies...)
Faculty of Science & Math (PMF)

- 84 scientific projects financed by the Ministry
- Several tens of international projects (bilateral, FP6, FP7, NSF, NATO, INTERREG, CARDS, SEERANet, COST, EMEP...)

PMF - SCI papers/year

\[
t = \frac{y}{k+1} \left(\sqrt{1 - \left(\frac{y}{k+1}\right)^2} - \frac{y}{k+1}\right)
\]

\[
f = \frac{x}{k+1} \left(\sqrt{1 - \left(\frac{x}{k+1}\right)^2} - \frac{x}{k+1}\right)
\]
Faculty of Science & Math

**Dept. of Geophysics** is the only place in Croatia to get univ. education in **SEISMOLOGY, METEOROLOGY, OCEANOGRAPHY, GEOMAGNETISM & AERONOMY** as undergrad., graduate & postgraduate

The Faculty is one of the largest at the Zagreb University
~700 employees (~200 professors, ~250 assistants)
~4500 enrolled students

- **Dept. of Geophysics**: 34 employees (only 5 without university education)

The smallest of 7 Dept’s of the Faculty of Science, Univ. of Zagreb (Biology, Chemistry, Geography, Geology, **Geophysics**, Mathematics, Physics).

**The Andrija Mohorovičić Geophys. Inst.** is a part of the Dept. taking care of education & scientific research (3+2+3 years ⇔ B. Sc. + M. Sc. + PhD)
- 8 professors, 9 assistants (total 13 PhD); **13 people in meteorol. & ocean**.
Main research topics:

- **Meteorology**: Climatic change, numerical modelling, turbulence, orographic circulation, pollution...

- **Oceanography** – Atmosphere-sea interaction, physical processes in the sea, tsunamis...

TSUNAMI MODELING (Central Adriatic archipelago)
Main research topics:

- **Seismology**: Cro. seismicity, seismic hazard, constitution of the Earth’s interior...
- **Geomagnetism** ...

Croatian Seismological Survey: Maintains the basic Croatian seismological network.

Station: STON (Croatia)  
Eastern Honshu, Japan, 13 June 2008, M = 7.0
Andrija Mohorovičić - the greatest Cro. scientist of all times discovered the Earth’s crust-mantle boundary (the Moho).

Earth's structure:
- Atmosphere
- Continental crust
- Oceanic crust
- Mantle
- Core

Mohorovičić's discovery:
- Mohorovičić's discontinuity
- Moho boundary

Građunstavni Zemljevid

(Journal of Geography)

Special issue on: "From the Crust to the Mantle: What is the Moho?"
Study of Geophysics

**2nd year**

- Physics & Math
- Geophysics
  - Meteorology & Physical Oceanography
    - 4th & 5th year
  - Seismology & Physics of Solid Earth

Schematic illustration of the undergrad. & graduate programs in Geophysics at the Univ. of Zagreb

Met. & Phys.Ocean.: 2 Full, 1 Assoc. 3 Assist. Prof’s, 1 Lectur., 2 Res. Assoc., 4 PhD students
Fac. of Sci. & Math.-Geophys.-Atmos. & Ocean

Research & Education

- **Main**: Coastal & mountain meteorol. & ocean., air-poll. & transport

- Almost each year an intl. conf. or workshop (>25 people) organized

- peer-rev. spec. issues ~ each year produced (*Met.Z.*, *JGR*, *BLM*)

- **35** peer-rev. papers over the last **1.5** years \(\Leftrightarrow 1.8/\text{sci.pap./yr./pers.}\)

- Several ongoing (i)ntl. sci. projects; PhD students & Assist. Profs. are the main man-power

- **Missing**: stronger hydrology, remote sensing, dynamical climatology, experimental meteorology; allowed more teachers, etc.