The "Pauli Ukraine Project": support for scientists who stay in Ukraine

There is a lot of solidarity and help for scientists and students who left Ukraine, e.g. in Austria there are several grant schemes by the Austrian Science Foundation (FWF), academy (ÖAW), universities, etc. worth several millions of Euros, restricted to those who are in Austria.

But there is a lack of support to those Ukrainian collegues who (must) stay (e.g. men aged 18-60).

Salary payments are reduced/stopped at many academic Ukrainian places and many scientists had to flee inside Ukraine, from cities like Charkiv, Sumy,... that Russia shells with artillery, bombs and missiles.

The "Pauli Ukraine Project" brings financial support for Ukrainian collegues in mathematics, physics, computer science and related (STEM) fields, who stay and continue research in these conditions. The Wolfgang Pauli Institute (<u>www.wpi.ac.at</u>) implements "Pauli scholarships" with a monthly flat rate of 1000 EUR (for "Postdocs" of all age, 750 EUR for PhD students).

The scholarship holder gets the money transferred to an account in Ukraine (bank transfer works well) without being obliged to be physically present in Austria.

These "pre/postdoctoral research training" scholarships are within the frame and rules of the usual "WPI thematic programs" that the Austrian ministry of science (BM.BWF) co-funds.

There is no broad open "call" since the available budget is small (initially 50 000 EUR) and since the WPI funding scheme requires the scholarship holder to fit into a "WPI thematic program" where one of the coorganisers has to propose potential grantees who work in the broad research field of the thematic program.

They then "apply upon invitation" with a 2 page form, where they also "justify" why they need the money – below some of these "justifications". A research theme, a CV is added, possibly letters of recommendation, as well as documentation of the circumstances.

The WPI has direct contacts to Ukrainian universities / UAS, e.g. thanks to a Ukrainian "full member" of the WPI, Andrii Chumak, who is co-organizer of an ongoing WPI thematic program on "mathematicsmagnetism-materials". Together with reliable senior scientists inside Ukraine the WPI team (including database manager Pedro del Real Lavergne from the Chumak group) can seriously assess each case.

The applications are checked for both the scientific content and the circumstances and ranked for final approval by the responsible WPI director Norbert J Mauser. For approved cases a one page "scholarship agreement" is prepared by the WPI administration (adm.director Stefanie Preuss assisted by Inma Foulquié Mauser) and sent by e-mail to the grantee who sends back a signed scan with a copy of the passport and the IBAN + BIC. After a final verification the money is transferred to the account in Ukraine where it arrives about 2 weeks after the application.

This way 25 scholarships for 2 months could be granted within 2 weeks in March; then the initial budget was exhausted.

WPI asked the highest officials of the Austrian ministry of science for an extra budget dedicated to the Pauli Ukraine Project, and they promptly committed an extra 50 000 EUR that allows for another 25 - 30 grants in April that WPI is pre-financing from its reserves.

In case more money would come, e.g. "donations", WPI could further increase number and duration of the "Pauli Ukraine scholarships". Several individual scientists have already committed to such donations (that can be deducted from income / profit tax since WPI legally is a non-profit association.)

The members of the WPI team work in a honorary capacity for the Pauli Ukraine Project, 100 % of the money from donations arrives directly on the accounts of the Ukrainian collegues; WPI has no self-interest and there is no obligation for the grantees coming with such a scholarships, they just add WPI support in the acknowledgment of their publications where they use their usual Ukrainian affiliation.

The fast and efficient way to implement such grants is relatively easy for WPI as a small flexible private institution created and managed by scientists for scientists, with minimal bureaucrazy, and no extra rules that restrict the legal boundaries (as large institutions tend to impose).

WPI has many years of experience with such scholarships, e.g. in the "Pauli corona project" 2020/21 a similar grant scheme was set up for collegues all over the world who were blocked by lockdowns and travel restrictions and stranded between two postdoc positions without salary.

The Pauli Ukraine Project can hopefully attract more budget and continue to support more Ukrainian collegues for longer periods – there would be a huge need in the mere scientific fields of WPI.

Hopefully similar grant schemes, in all field of science and humanities, can be set up in other countries, by institutions with much higher budgets - WPI would be happy to share the "know-how" and experience.

JUSTIFICATION FOR APPLICATION (Yuliia, 30 year old PhD student in plasma physics)

Having spent 11 days in Kharkiv without any safe option to flee, I finally managed to escape the city because the building I used to live in was damaged, and it became even more dangerous to stay. Since both NSC KIPT and Karazin University were shelled by Russian forces, I have lost not only the place to conduct my studies but also my financial income. Besides my own needs, I have to take care of my elderly parents, who are currently in poor health.

My participation in the WPI supporting program was considered and adopted by thirty members of the Scientific Council of the Institute of Plasma Physics National Science Centre "Kharkiv Institute of Physics and Technology", Kharkiv, Ukraine under the guidance of the Director Academician, Professor Dr. Igor Garkusha, whose personal letter of recommendation is attached.

JUSTIFICATION FOR APPLICATION (Dimitry, 58 year old mathematical physicist)

My habitual place of residence is Kharkiv, which is currently under everyday shelling. My apartment building was partially damaged during an air strike on March 2, 2022. I had to flee from Kharkiv, and now I am temporarily settled (rent an apartment) in Kremenchuk, Ukraine (with my wife, two our mothers (80 and 85) and our daughter (16)). Since I am 58, I can't leave Ukraine now. Though I have 3 short term invitations for the Spring of 2022 (Aston University (Erasmus+ program), University of Paris, and University du Littoral Cote d'Opale (France)), apparently I will not be able to realize these visits. My institute in Kharkiv (B. Verkin Institute for Low Temperature Physics and Engineering) currently has serious trouble with organizing the salary payments; for March, the best we can expect is the "idle state" for the institute, which means a significant loss in salary, and I don't expect any improvement with this respect in the nearest future.

JUSTIFICATION FOR APPLICATION (Yuliia, 42 year old postdoc in computational magnetism)

Before the war I was on maternity leave. At the very day when the war began my baby girl died in Kiev children's hospital «Ohmatdyt». Thus my maternity leave abruptly ended and my family and me found ourselves far from home with almost no personal goods and documents and with no possibility to come back to Sumy. Thus from the beginning of the war we are still staying in Kiev and are not fleeing west because my elderly parents' health is not good enough for long and hard refugee trip. Sumy state university can offer only partial and the smallest salary considering sudden end of the maternity leave in the middle of academic year. I would greatly appreciate a financial support to be able working remotely.

JUSTIFICATION FOR APPLICATION (Valerij, 82 year old physicist)

Please add the justification for the need for such support within several sentences. Цей пункт можна також заповнити українською – опишіть коротко Вашу ситуацію і необхідність в такій підтримці. Задача цієї програми допомогти тим хто найбільше того потребує.

I am 82 years old and live only one in my apartment in Kharkiv. My work now in spin caloritronics is connected with my two PhD students. Salary payment in the University now is suspended. I recently had surgery treatment and require financial support for medicaments.

JUSTIFICATION FOR APPLICATION (Ihor, 44 year old physicist in magnetism and sensors)

At present, I am in close proximity to the area of hostilities, namely in city of Sumy. Much to my regret, there is no chance to evacuate my family to safer place. I have to take care of my parents (retirees): Mother 68 and Father 70 years old, God daughter aged 8 years and niec aged 4 years old. In addition, I must provide parents' medicines. My mother after the heart surgery (the replacement of mitral valve and plastic tricuspid valve ring). Operated at the Heart Center (Kyiv). Also, she has the diagnosis: pulmonary hypertension 3-degree, hypertonic disease II stage, 3 degrees, risk 3. After surgery my mom must take her medicines for life, including expensive drugs for the treatment of pulmonary hypertension. My father has 2nd type diabetes. From 01.03.2022, I was transferred at my employment for part time position (0.53%) with a salary of about 220 € monthly, which is not enough for medicines and the simplest material provision of the family. There is no other income. In this difficult situation I try to do everything to keep the potential and continue educational and scientific activities in the time of peace.