

Subject: Application for the position of Research Professor in Physics Department

I am applying for the position of Research Professor in Physics Department.

Since receiving my PhD in 2006, I have published 23 peer-reviewed papers. The most recent *Fuchs, Ž. and D. J. Raymond (2017), A simple model of intraseasonal oscillations, J. Adv. Model. Earth Syst., 9* was highlighted as the paper of the month in JAMES. I also published a book and contributed a chapter to another. During my time in Croatia, I have been PI on multi-million dollar grants from European Foundation (EMBRACE, COST) as well as Croatian National Foundation projects. I have organized multiple international research conferences and workshops.

I have been a Faculty Adjunct with Physics Department since 2007, Visiting Faculty three times since 2007 and an active member of an atmospheric physics research group since 1999. I have co-mentored a graduate student Mike Herman who recently got his PhD degree. I am currently supervising 3 undergraduate students and one post-doc as well as co-mentoring a graduate student.

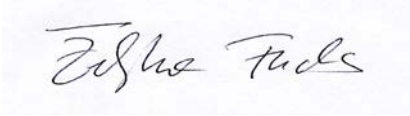
I am project coordinator and manager for the field project Organization of Tropical East Pacific Convection OTREC 2019 (budget 5.5 million dollars). I am co-PI on 3 different research grants (2 NSF and one NASA). Now that I have my green card I will be able to be a PI on future US projects.

Recently I founded the Climate and Water Center (cwc.nmt.edu) at New Mexico Tech. The Center incorporates 7 different departments from NMT as well as many partners from outside Tech. The Center features scientists working on cutting-edge research and applying it to the real world. Its goal is to improve the New Mexico and southwestern economies and industry through interdisciplinary research and innovative problem-solving research and outreach. It builds bridges between physics, atmospheric physics, engineering, hydrology, geophysics, chemistry, applied math, economics, computer science, and education. It represents a way to use science to solve overarching problems of our society, in particular applied to weather prediction, climate change, water management, and high technology.

I wish to keep building a strong research group, in atmospheric physics and in interdisciplinary fields concentrated around the Center. I can be of service to the Physics Department by mentoring and supervising students, bringing more interesting research and helping with the outreach programs that are important for our recruitment and STEM awareness. One of the examples of what the Center is doing is placing mini meteorological stations in schools in Socorro, developing science curricula around hands-on data gathering experiences as well as connecting those findings to the data from field projects such as OTREC.

As a Research Professor at Physics Department I would like to teach occasional graduate course in atmospheric physics. I am also open to other services that the Physics Department might require and we both find useful.

Sincerely,

A handwritten signature in black ink, reading "Zeljka Fuchs", is centered within a light blue rectangular box.

Zeljka Fuchs