

# Curriculum Vitae

## Norbert Požár

Kanazawa University  
Faculty of Mathematics and Physics, Institute of Science and Engineering  
920-1192 Ishikawa, Kanazawa city, Kakuma town  
<http://polaris.s.kanazawa-u.ac.jp/~npozar/>  
[npozar@se.kanazawa-u.ac.jp](mailto:npozar@se.kanazawa-u.ac.jp)

### Employment

**Kanazawa University, Kanazawa, Japan** (August 2013–present)

Assistant Professor

nonlinear partial differential equations, free boundary problems, homogenization, viscosity solutions, crystal growth, phase transitions, mathematical modeling

**University of Tokyo, Tokyo, Japan** (September 2011–July 2013)

PD Researcher

### Education

**University of California, Los Angeles, USA** (September 2006–June 2011)

Ph.D. in Mathematics (June 2011)

Thesis title: Free boundary problems

Advisor: Inwon C. Kim

**Charles University in Prague, Faculty of Mathematics and Physics, Prague, Czech Republic** (2001–2006)

Master's Degree in Physics, program Mathematical Modeling in Physics and Engineering (June 2006)

Master's thesis advisor: Oldřich Semerák

### Research experience

**Research in Industrial Projects for Students**, UCLA, Institute for Pure and Applied Mathematics, Los Angeles, USA (summer 2005)

### Awards

Wakate B grant from the Japan Society for the Promotion of Science (2014–2018)

UCLA Dissertation Year Fellowship (2010)

Dorothy Radcliffe Dee Fellowship (2006)

Shapiro International Fellowship (2006)

Full financial support (awarded by UCLA, Graduate Division) (2006–2010)

Stipend for students with high GPA (awarded by Charles University in Prague) (2002–2004)

Bronze Medal at 32nd International Physics Olympiad, Antalya, Turkey (2001)

### Teaching experience

UCLA, as a teaching assistant, 9 quarters; Kanazawa University, 1 semester

*Undergraduate courses:* differential calculus, programming in Java, linear and nonlinear systems of differential equations

*Graduate courses:* real analysis, complex analysis, applied ordinary differential equations

## Papers and Preprints

- [1] N. Požár, *Homogenization of the Hele-Shaw problem in periodic spatiotemporal media*, Arch. Rational Mech. Anal. (2014), to appear.
- [2] M.-H. Giga, Y. Giga, and N. Požár, *Periodic total variation flow of non-divergence type in  $\mathbb{R}^n$* , J. Math. Pures Appl. **102** (2014), no. 1, 203–233.
- [3] ———, *Anisotropic total variation flow of non-divergence type on a higher dimensional torus*, Adv. Math. Sci. Appl. **21** (2013), no. 1, 235–266.
- [4] I. C. Kim and N. Požár, *Nonlinear elliptic-parabolic problems*, Arch. Rational Mech. Anal. **210** (2013), no. 3, 975–1020.
- [5] N. Požár, *Long-time behavior of a Hele-Shaw type problem in random media*, Interfaces Free Bound. **13** (2011), no. 3, 373–395.
- [6] I. C. Kim and N. Požár, *Viscosity solutions for the two-phase Stefan problem*, Comm. Partial Differential Equations **36** (2011), no. 1, 42–66.
- [7] N. Požár, *Selected properties of stationary axially symmetric fields in general relativity*, Master’s thesis, Charles University in Prague, Prague, Czech Republic (2006).

## Talks

1. HMMC seminar, Hokkaido University, Sapporo, Japan (October 2014)
2. HMA seminar, Hiroshima University, Hiroshima, Japan (May 2014)
3. Participating Analysis Seminar, University of California, Los Angeles, USA (March 2014)
4. Analysis seminar, Kobe University, Kobe, Japan (January 2014)
5. Workshop on Free Boundaries in Laplacian Growth Phenomena and Related Topics, Tohoku University, Sendai, Japan (October 2013)
6. Czech-Japanese Seminar in Applied Mathematics 2013, Meiji University, Tokyo, Japan (September 2013)
7. PMI Seminar, Postech, Pohang, Korea (July 2013)
8. Applied Mathematical Seminar at Tohoku University, Sendai, Japan (May 2013)
9. Kanazawa University, Kanazawa, Japan (February 2013)
10. Fukae workshop on PDEs, Kobe, Japan (January 2013)
11. Weak KAM Theory and Related Topics, Tokyo, Japan (January 2013)
12. Seoul-Tokyo Conference on Elliptic and Parabolic PDEs and Related Topics, KIAS, Seoul, Korea (November 2012)
13. 5th Polish-Japanese Days on Nonlinear Analysis in Interdisciplinary Sciences - Modelings, Theory and Simulations, Kyoto, Japan (November 2012)
14. Analysis seminar, University of Tokyo, Tokyo, Japan (May 2012)
15. Front propagation, biological problems and related topics: viscosity solution methods for asymptotic analysis, Sapporo, Japan (September 2011)
16. 36th Sapporo Symposium on Partial Differential Equations, Sapporo, Japan (August 2011)
17. PDE seminar, University of California, Irvine, USA (February 2011)
18. PDE seminar, University of California, Los Angeles, USA (November 2010)