

## ALEXEI ONATSKI

### Department of Economics, Columbia University

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### EDUCATION

1996-2001	<b>Harvard University</b> Ph.D. in Economics, June 2001 Thesis: “Robust Monetary Policy under Model Uncertainty”	Cambridge, MA
1994-1996	<b>New Economic School</b> MA in Economics, <i>Summa cum Laude</i>	Moscow, Russia
1993-1995	<b>Moscow State University</b> PhD student in Stochastic Processes	Moscow, Russia
1986-1993	<b>Moscow State University</b> Department of Mechanics and Mathematics M.Sc. in Mathematics/Applied Mathematics <i>Summa cum Laude</i> Thesis: “On a Refinement of the Central Limit Theorem”	Moscow, Russia
1984-1986	<b>Kolmogorov’s specialized Physics &amp; Mathematics Boarding School</b>	Moscow, Russia

### PROFESSIONAL EXPERIENCE

2001-Present	<b>Economics Department of Columbia University</b> <i>Associate Professor of Economics</i>	New York, NY
2005	<b>Federal Reserve Bank of New York</b> <i>Consultant</i>	New York, NY
2000	<b>New Economic School</b> <i>Visiting Professor of Economics</i>	Moscow, Russia
1997-1999 (Part-time)	<b>Harvard University</b> <i>Teaching Fellow</i> Assisted for courses in <i>Econometrics, Statistics, Time Series Econometrics, Economics of Discontinuous Change</i>	Cambridge, MA
1998-1999 (Part-time)	<b>Harvard Business School</b> <i>Teaching Fellow</i> Assisted for the course <i>Quantitative Methods</i>	Boston, MA
1998-1999 (Part-time)	<b>National Bureau of Economic Research</b> <i>Research Assistant</i>	Cambridge, MA

1997 (Part-time)	<b>Harvard Institute for International Development</b> <i>Research Assistant</i>	Cambridge, MA
1996	<b>New Economic School</b> <i>Teaching Assistant</i> Assisted for courses in <i>Statistics</i> and <i>Industrial Organization</i>	Moscow, Russia
1994	<b>Moscow State University</b> <i>Teacher of Mathematics</i> at Special Courses for Prospective Students	Moscow, Russia

## SCHOLARSHIPS, PRIZES AND AWARDS

2003	<b>Award for the Best Graduate Teacher</b> The Association of Graduate Economic Students of Columbia University	New York, NY
2002	<b>Outstanding Graduate Teaching Award</b> The Association of Graduate Economic Students of Columbia University	New York, NY
2002	<b>Summer Research Fellowship</b> Awarded by the Faculty Development Committee of Columbia University	New York, NY
1996-1998	<b>Graduate Student Fellowship</b> Economics Department of Harvard University	Cambridge, MA
1996	<b>Merle Fainsod Prize</b> Davis Center for Russian and Eurasian Studies at Harvard Awarded to top incoming graduate students in the field of Russian, Soviet, or post-Soviet studies	Cambridge, MA
1996	<b>Second Prize for Outstanding Master's Thesis</b> New Economic School	Moscow, Russia
1994-1996	<b>Special Stipend</b> New Economic School Awarded to students with higher GPA	Moscow, Russia
1986-1993	<b>Special Stipend</b> Moscow State University	Moscow, Russia
1984	<b>Fourth Prize at All-Soviet Union Mathematics Olympiad</b>	Ashhabad, Russia
1984	<b>Third Prize at All-Russia Mathematics Olympiad</b>	Nalchik, Russia

## PROFESSIONAL INTERESTS

Econometrics of Large Dimensional Data, Time Series, Random Matrix Theory, Functional Data

**PAPERS**

- 2007            **Asymptotics of the principal components estimator of large factor models with weak factors and i.i.d. Gaussian noise**  
Submitted to *Journal of Econometrics*
- 2007            **A formal statistical test for the number of factors in the approximate factor models**  
Revise and resubmit to *Econometrica*
- 2007            **The Tracy-Widom limit for the largest eigenvalues of singular complex Wishart matrices**  
Accepted to *Annals of Applied Probability*
- 2006            **Determining the number of factors from empirical distribution of eigenvalues**  
Revise and resubmit to *Review of Economics and Statistics*
- 2006            **Winding Number Criterion for Existence and Uniqueness of Equilibrium in Linear Rational Expectations Models**  
*Journal of Economic Dynamics and Control*, 30, pp. 323-345
- 2005            **Monetary Policy under Uncertainty in Microfounded Macroeconometric Models**  
Macro Annual 2005, MIT press  
Joint with Andrew Levin, Noah Williams, and John Williams
- 2004            **Curve Forecasting by Functional Autoregression**  
Joint with Vladislav Kargin  
Submitted to *Journal of Multivariate Analysis*
- 2004            **Empirical and Policy Performance of a Forward-Looking Monetary Model**  
Manuscript  
Joint with Noah Williams
- 2003            **Modeling Model Uncertainty**  
*Journal of European Economic Association* Vol. 1, No. 5  
Joint with Noah Williams
- 2002            **Robust Monetary Policy under Model Uncertainty in a Small Model of the US Economy**  
*Macroeconomic Dynamics*, Vol. 6, No. 1  
Joint with James Stock
- 2001            **Robust Monetary Policy under Model Uncertainty: Incorporating Rational Expectations**  
To appear in a special issue of *Journal of Applied*

*Econometrics*

- 2001            **Searching for Prosperity**  
*Carnegie-Rochester Conference Series on Public Policy*  
Vol. 55, December  
Joint with Michael Kremer and James Stock
- 2000            **Testing Shape Restrictions on the Steady-State  
Distribution of a Finite Markov Chain**  
Manuscript
- 1999            **Minimax Analysis of Model Uncertainty: Comparison  
to Bayesian Approach, Worst Possible Economies, and  
Robust Monetary Policies**  
Manuscript

**ARTICLES**

- 2007            **Model Uncertainty**  
An article for new Palgrave Dictionary of Economics

**WORKING PAPERS**

- 2007            **Determining the number of factors in generalized  
dynamic factor models: a random matrix approach**

**REFEREEING ACTIVITY**

Referee for: *Econometrica*, *Review of Economics and Statistics*, *Journal of Monetary Economics*, *Journal of Economic Dynamics and Control*, *American Economic Review*, *Journal of European Economic Association*, *The Economic Journal*, *The Journal of Applied Econometrics*, *Journal of Money, Credit and Banking*, *Review of Economic Dynamics*, *National Science Foundation*.

**OTHER**

Member of the editorial board of Russian econometric journal *Quantile*.  
Member of American Economic Association

**PERSONAL INFORMATION**

Date of Birth:            June 17, 1969  
Marital Status:        Married  
Wife:                    Onatskaia Ekaterina  
Children:                Sasha, Nina  
Immigration status:    Permanent resident (Green Card)