

## CURRICULUM VITAE OF VICTOR MALKA

### PERSONAL INFORMATION

Family name, First name: Malka, Victor

Researcher unique identifier(s): <https://orcid.org/0000-0002-0488-2587>

Date of birth: 11/12/1960, born in Casablanca (Morocco). Nationality: French & Israeli

Married. Two daughters born in 2000 & 2002

<https://www.weizmann.ac.il/complex/malka/>

### ➤ EDUCATION

1998 HDR (Habilitation à Diriger la Recherche)

1990 PhD Thesis in atomic physics at LULI (physic of University of Paris XI-Orsay)

1987 MSc in physics of University of Orsay-Paris XI

1984 ENSCR (Ecole Nationale Supérieure de Chimie de Rennes)

### ➤ CURRENT POSITION

2019 – Present Professor at the Physics Faculty of the Weizmann Institute of Science (WIS), Israel

2023 – Present Scientific Deputy Director at ELI-NP, Magurele, Romania

### ➤ PREVIOUS POSITIONS

2020 to 2021 Visiting Professor at HZDR Dresden (Humboldt Research Awards)

2001 to 2019 Moved to LOA (mixt research unit of CNRS/Polytechnique/ENSTA)

2003 to 2015 Professor at Ecole Polytechnique (12 years contract in addition to the CNRS position)

1990 to 2021 Permanent CNRS researcher at LULI (DR2 in 2003, DR1 in 2009, DRCE in 2016)

### ➤ SCIENTIFIC PRODUCTIVITY

380 Publications, 264 in refereed journal (38 PRL, 3 Nature, 5 Nature Physics, 1 Science, 4 Nature Photonics, 5 Nature Communication, 1 Rev. of Modern Physics, 4 Optics Letters, 7 PRE, 27 Phys. Plasmas, 15 NJP, 2 RSI, 7 PRS-TA, 8 IEEE, etc...). Number of citations 17,754 (25,844), Hirsch factor 63 (77) from ISI-WoS (Google Scholar) in March 2024. 217 invited international conferences (more than 50 in plenary session including SPIE, APS, EPS, IPAC, OASIS), 104 invited seminars (75 international, 29 national). 4 book chapters. 6 patents.

### ➤ FELLOWSHIPS AND AWARDS (selection)

2022 Laureat of the European Innovation Council with the project EBEAM4THERAPY

2019 Humboldt Research Awards

2019 Alfven Prize of the European Physical Society

2018 Officer of the Physics Division of the European Academy of Sciences

2017 Julius Springer Prize

2017 Holweck Prize from the French Physical Society and from the Institute of Physics

2017 QEOD Prize from the European Physical Society

2017 Member of the European Academy of Sciences

2016 EPS Fellow

2015 Batsheva de Rothschild Fellow

2013 Laureat of the European Research Council (AdG de l'ERC) with the project X-5

2012 Foreign Honorary Member of the Romanian Academy of Science (AOSR)

2009 Grand prix de l'Etat de l'Académie des Sciences

2008 Laureat of the European Research Council (AdG de l'ERC) with the project PARIS

2008 Prix du magazine la Recherche

2008 Fellow of the American Physical Society

2007 IEEE/NPSS Particle Accelerator Science and Technology Award

### ➤ SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

1998– Present 20 Postdocs/ 24 PhD Students/ 16 Master Students.

### ➤ TEACHING ACTIVITIES

2019 – 2019 Professor at the Weizmann Feinberg Graduate School

2012 – 2019 Professor at Master of Grands Instruments and of Master on Fusion

2009 – 2013 Visiting Professor at Tata Institute of Mumbai in India (2 weeks/year)

2003 – 2015 Professor at Ecole Polytechnique (12 years contract, 96 hours/year)  
 ➤ **ORGANISATION OF SCIENTIFIC MEETINGS (selection)**  
 2017– 2022 Organiser of « CHILI » international conferences on high field laser matter interaction, Israel  
 2018 Organiser of « Frontiers in Laser Sciences » conference at WIS, Israel  
 2017 Organiser of the « Medical applications with laser plasma accelerators » symposium, Berlin  
 2015 Organiser of the International Workshop on Laser Plasma Accelerators in Guadeloupe, France

➤ **INSTITUTIONAL RESPONSIBILITIES (selection)**

2019 – 2023 Member of the Large Equipment Committee at WIS  
 2019 – 2023 Member of the V7 Hiring Professor Committee at WIS  
 2002 – 2019 Member of LOA scientific Council (Ecole Polytechnique, France)

➤ **REVIEWING/EDITORIAL/EXPERTISE ACTIVITIES (selection)**

2023 – Present Member of the Organizing Committee AAC  
 2022 – Present Member of Scientific Advisory Board of HZDR  
 2020 – 2024 Editorial Board of PRX (American Physical Society)  
 2019 – Present Member of the Program Scientific Committee IPAC (International Particle Acc. Conference)  
 2019 – Present Editorial Board of JPP (Journal of Plasma Physics, Cambridge University Press)  
 2018 – Present Member of the Program Advisory Committee LULI/ELI-NP/LCLS  
 2017 – Present Member of Int. Adv. Committee of LPAW, EAAC, HEDS, etc. in Europe, Asia and USA  
 2017 – Present Editorial board member of Matter and Radiation at Extremes (China)  
 2017 – Present Panel Member of for Distinguished Professor Grant at the Swedish Research Council  
 2017 – Present Member of Prizes/Awards committees in Europe (EPS, DFG, etc.) and in Israel (Technion)  
 2017 Expert for Science and Technology Facility Council executive board  
 2013 Member of the International Review Panel for Wallenberg Foundation in Sweden  
 2014 Member of Panel of expert for Swiss National Science Foundation  
 2011 Member of the International Review Panel for Clusters Excellence in Germany  
 2011 – 2018 Member of Panel of expert for ERC -PE2-Fundamental Physics  
 2010 Editor with C. Joshi for NJP special review « Laser and Beam plasma accelerators » (Europe)  
 2008 – Present Member of scientific committee of conferences (>30, CLEO, SPIE, EPS, FPPT, ICPP, AAC, LPAW, HEDS, ICONO, ICFA, Frontiers of NonLinear Physics, Nuclear Photonics, PAHBB, IPAC, EAAC, Q-Basics...)  
 2008 – 2011 Member of International IEEE PAST Award committee in 2008, 2009, 2010, 2011  
 2005 – 2010 Member of Panel of expert of HEP and DOE (Europe & USA)  
 2005 – Present President (and founder) of the John Dawson PhD prize since 2005  
 2001 – Present External reviewer for Professors Position in US, India and in European countries  
 1998 – Present Reviewer for scientific journal (Science, Nature, Nature Communications, Nature Photonics, Nature Physics, PRL, PRX, OL, PoP, PPCF, EPL, PPCF, NJP, RSI...)  
 1994 – Present Expert for the DOE, NSF (USA), ESF, ERC, DFG, CEA, CLRC (UK), BSF (Israel-USA).  
 1993 – Present Member of panel (> 50) for PhD and HDR diploma in France, Europe, and Asia

➤ **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2020 – Present Elected member of EPS Accelerator DG  
 2002 – 2005 Elected member of EPS Scientific Council  
 1998 – Present Member of SFP (French Physical Society), EPS (European Physical Society), APS (American Physical Society), SIF (Italian Physical Society), OSA (Optical Society of America) and SFO

➤ **SCIENCE MEDIA and SOCIETY (selection)**

Portrait in Le Monde (25/04/2018), France Culture (04/04/2018), Libération (23/04/2015). Reflets de la Physique 2013, La recherche 2010, Nature « the plasma revolution » (449, 2007), Science et vie (Mai 2007). France3 TV, France Inter. 30' Interview for the national Indian TV Dodarsan (15/04/2008). La stampa, Science et Avenir (2007), La recherche (2007, 2010), American Scientific (feb.2006). Author « Pour la science » (mars 2006), La Recherche (avril 2005). Frankfurt Allemagne Zeitung (9 March 2005), in Neue Zürcher Zeitung. Etc...

➤ **FIELDS OF INTEREST (selection)**

Plasmas physics, relativistic laser-plasma interaction, plasma accelerators, particles and X ray beam production, ultrafast phenomena, radiotherapy, radiobiology, material science, inertial fusion.

➤ **INDUSTRIES**

Initiated the spin-off company “SourceLab” dedicated to compact gamma ray source for non-destructive material inspection and development of laser plasma accelerators. 6 patents.