

CV of Victor MALKA

Age: 59, born in Casablanca (Morocco), married, 2 children (Maya and Dinah)

<u>Personal address:</u>	<u>Professional address:</u>
16/18 Bar Ilan street 67132 Tel Aviv, Israel Tel: 0505109818	Physics of Complex Systems Weizmann Institute of Science, 234 Herzl street, Rehovot 7610001, Israel Tel: 089344294, victor.malka@weizmann.ac.il

Fields of interest: plasmas physics, relativistic laser-plasma interaction, plasma accelerators, particles and X ray beam production, ultrafast phenomena, radiotherapy, radiobiology, material science, inertial fusion.

EDUCATION

1998	HDR Université d'Orsay, France
1988-1990	École Polytechnique, Palaiseau, France PhD, atomic and plasmas physics
1985-1987	Université d'Orsay, France Master degree in physics
1982-1984	École Nationale Supérieure de Chimie de Rennes, France

RESEARCH

Since Oct. 2017	Exceptional Class Research Director at CNRS (on leave)
Since Oct. 2015	Professor at Weizmann Institute of Science (Israel) Relativistic Laser Interaction
2009-2015 <i>Adj. Faculty Member</i>	Tata Institute of Bombay (India) Relativistic Laser Interaction
Since October 2004 - <i>CNRS Research Director</i>	LOA, Ecole Polytechnique-ENSTA-CNRS, Palaiseau, France Development and application of plasma particles accelerators
2003-2015 Professor at <i>Ecole Polytechnique</i>	École Polytechnique, Palaiseau, France Plasmas physics – laser physics courses
October 2001-2004 <i>CNRS Researcher</i>	LOA, Ecole Polytechnique-ENSTA-CNRS, Palaiseau, France Creation of the SPL group
1990-2001 <i>CNRS Researcher</i>	LULI, École Polytechnique, Palaiseau, France Inertial fusion and Plasma laser interaction

TEACHING

Professor at Weizmann Institute of Science (since October 2015). Professor at Ecole Polytechnique (2003-2015). Supervisor of 19 PhD students in France and 5 in Italy (Laureat thesis)

PUBLICATIONS

376 Publications, 237 in refereed journal (33 PRL, 3 Nature, 4 Nature Physics, 1 Science, 2 Nature Photonics, 4 Nature Communication, 1 Rev. of Modern Physics, 2 Optics Letters, 7 PRE, 27 Phys. Plasmas, 6 NJP, 2 RSI, 2 PRS-TA, 8 IEEE, etc...). Number of citations 12348 (18756), Hirsch factor 53(63) from ISI-Web of Science (Google Scholar) in January 2020.

189 invited international conferences (more than 45 in plenary session including APS, EPS, IPAC, OASIS), 92 invited seminars (67 international, 31 national), 4 book chapters. 6 patents.

PRIZES AND AWARDS

2007: IEEE/NPSS Particle Accelerator Science and Technology Award "For groundbreaking work on laser-plasma accelerators".

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

2008 : Prix du magazine la Recherche

2008 : Elected by the « French Science Today » program of the French Foreign Office in India

2008 : Fellow of the American Physical Society

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

2010 : CNRS excellence scientific awards

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

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

2015 : Batsheva de Rothschild Fellow

2016 : EPS Fellow

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
2018 : Officer of the Physics Division of the European Academy of Sciences
2019 : Alfvén Prize of the European Physical Society
2019 : Humboldt Research Awards

LEARNED SOCIETIES

Member of SFP, EPS, APS, SIF and SFO. Elected member of EPS Scientific Council 2002-2005.

SCIENTIFIC ADMINISTRATION

Member of the Scientific Council of the "Maison France-Weizmann".
Member of Panel of expert for ERC -PE2-Fundamental Physics (2011-2018), for Swiss National
Organiser of « Frontiers in Laser Sciences » conference at Weizmann Institute of Science, Israel (27-28 Juin 2018)
Panel expert member for P2IRC in CANADA (2016-2020).
Organiser of the « Medical applications with laser plasma accelerators » symposium, Berlin, (October 5 2017)
Member of the International Review Panel for Wallenberg Foundation in Sweden (2013) and for the international review panel for Distinguished Professor Grant at the Swedish Research Council (2017-2019).
Member of the International Review Panel for Clusters Excellence in Germany (2011).
Member of Panel of expert of HEP and DOE (2005-2010).
Editorial Board of JPP (Journal of Plasmas Physics), MRE (Matter and Radiation at Extremes), of JIPLAAP (the journal "Problems of Atomic Science and Technology").
Organizer of the Weizmann-X Conference on Frontiers in Laser Science (27-28 Juin 2018)
Organizer of the International Workshop on Laser Plasma Accelerators in Guadeloupe (2015)
Organizer of colloquium on New technologies in Cancer Research and Cancer Treatment for World Conference Medical physics and Biomedical Engineering, Beijing, May 2012.
Associated editors for NIMA special review « Ions Acceleration with high Power Lasers: Physics and Applications » (2009). Organizer of colloquium for SFP UHI 2011.
Editor with C. Joshi for NJP special review « Laser and Beam plasma accelerators » (2010), Editorial board member of Matter and Radiation at Extremes (since 2017)
« Chargé de mission » for CNRS « accelerators and lasers » (2010).
Coordinator of « accelerators » task for ELI and ILE projects. Coordinator of JRA « Laptech » FP7. Coordinator of ACCEL1 (ANR).
Coordinator of WP ANAC IA of EUCARD (European coordinated accelerators research and development), Coordinator of WP LAPTECH IA of LASERLAB2.
Partner of NEST project Euroleap, CARE (FP6), and ANR GOSPEL.
Expert for the DOE, NSF (USA), ESF, ERC, DFG, CEA (DAM and DSM), CLRC (UK), BSF (Israel-USA). President (and founder) of the John Dawson PhD prize since 2005
Member of International IEEE PAST Award committee in 2008, 2009, 2010, 2011.
Member of scientific committee of conferences and chairman of sessions (>30, CLEO, SPIE, ESF, OSA, FPPT, ICPP, AAC, LPAW, HEDS, ICONO, Organizing Committee of the ICFA Mini-Workshop on Future gamma-gamma, etc...). Member of international advisory committee of LPAW, EAAC, FPPT, HEDS, etc.
External reviewer for Professors Position in US, India and in European countries.
Member of panel for PhD and HDR diploma in France, Europe and Asia.

POPULARIZATION

Portrait in Le Monde (25/04/2018), France Culture (04/04/2018), The conversation « accélérateurs à plasma-laser, révolution à venir dans le traitement du cancer », (06/04/2016). Libération (23/04/2015). Portals H2020-2014, Reflets de la Physique 2013, La recherche 2010, Nature « the plasma revolution » (449, 2007), Science et vie (Mai 2007). Télévision : France3, France Inter. 30' Interview for the national indian television Dodarsan (15/04/2008). Articles in La stampa, Science et Avenir (2007), La recherche (2007, 2010), American Scientific (feb.2006). Author « Pour la science » (mars 2006), La Recherche (avril 2005). Cité dans Frankfurt Allemagne Zeitung (9 march 2005), in Neue Zurcher Zeitung. Etc...

INDUSTRIES

Spin-off company "SourceLab" dedicated to compact gamma ray source for non-destructive material inspection and development of laser plasma accelerators. 6 patents.