

Laser-hybrid Accelerator for Radiobiological Applications (LhARA)

The LhARA collaboration

Patrick G Johnston Centre for Cancer Research, Queens University Belfast, 97 Lisburn Road, Belfast, BT9 7AE
K.M. Prise

*School of Mathematics and Physics, Queen's University Belfast, University Road, Belfast, BT7 1NN, Northern
Ireland, UK*
M. Borghesi, C. Palmer

Dept of Medical Physics and Biomedical Engineering, University College London, WC1E 6BT
R. Amos, B. Cox

*Department of Medical Physics, University Hospital Birmingham Foundation NHS Trust, Edgbaston, Birmingham,
B15 2TH*
S. Green

*Department of Cancer and Genomic Sciences, College of Medicine and Health, University of Birmingham,
Edgbaston, Birmingham, B15 2TT, UK*
J.L. Parsons

School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK
P. Allport, C. Burne, T. Price, C. Wheldon

DG Unit, CERN, CH-1211 Geneva 23, Switzerland
M. Dosanjh, J. Prado Pico, M. Turner

Department of Physics, Lancaster University, Bailrigg, Lancaster LA1 4YW, UK
E. Boella, T.S. Dascalu, S. Jamison, S.R. O'Neill, P. Ratoff

Department of Physics, University of Liverpool, Liverpool L69 7ZE, UK
N. Kumar, M. Patel, C.P. Welsch

Department of Physics and Astronomy, The University of Manchester, Oxford Rd, Manchester, M13 9PL, UK
W. Bertsche, S. Boogert

Department of Physics, SUPA, University of Strathclyde, Glasgow G4 0NG, UK
C. Whyte

Corerain Technologies, 14F, Changfu Jinmao Building (CFC), Trade-free Zone, Futian District, Shenzhen, Guangdong, China

R. Xiao

30 *Berkeley, USA*

A. McIlvenny, L. Obst-Huebl, A. Snijders

Imperial College London, CRUK PPI group, Charing Cross Hospital, London W6 8RF

H.C. Hall

The Institute of Cancer Research, 123 Old Brompton Road, London, SW7 3RP, UK

35 J. Bamber, E.J. Harris , U. Oelfke

INFN Catania, Via Santa Sofia,64 - 95123 Catania - Italy

F. Romano

Department of Surgery and Cancer, Imperial College, Hammersmith Hospital London W12 0NN

I. McNeish, P. Price

40 *Department of Aeronautics, Imperial College London, Exhibition Road, London SW7 2AZ, UK*

A. Knoll

Department of Computing, Imperial College London, Exhibition Road, London SW7 2AZ

W.G. Luk

Dept. Radiation Physics and Radiobiology, Imperial College Healthcare NHS Trust, London, UK

45 C. Hardiman, R. McLauchlan

Imperial College NHS Healthcare Trust, The Bays, South Wharf Road, St Mary's Hospital, London W2 1NY, UK

D. Gujral

Department of Physics, Imperial College London, Exhibition Road, London SW7 2AZ, UK

50 A. Howard, W.G. Jones, H.T. Lau, J.M. McGarrigle, R.A. Smith

Institut Curie-Orsay Research Center, Bat a Campus d'Orsay, 91400 Orsay, France

A. Fernandez-Rodriguez, T. Masilela, F. Pouzoulet, Y. Prezado

Department of Physics, Royal Holloway University of London, Egham, Surrey, TW20 0EX, UK

S. Gibson, M. Pereira, W. Shields

55 *The John Adams Institute for Accelerator Science, Department of Physics, Imperial College London, Exhibition Road, London SW7 2AZ, UK*

N.P. Dover, O.C. Ettlinger, A. Howard, T.J. Kuo, A. Kurup, H.T. Lau, K.R. Long, A.E. MacIntosh-LaRocque, M. Maxouti, Z. Najmudin, J. Pasternak, J. Pozimski, R. Taylor

John Adams Institute, University of Oxford, Keble Rd, Oxford, OX1 3RH.

60 P.N. Burrows

Leo Cancer Care, Broadview, Windmill Hill, Hailsham, East Sussex, BN27 4RY, UK
S. Towe, P. Underwood

Institute of Systems, Molecular and Integrative Biology, University of Liverpool, Biosciences Building, Crown Street, Liverpool L69 7BE

65 H. Poptani

Department of Physics, University of Liverpool, Liverpool L69 7ZE, UK
T. Greenshaw, P. Weightman

Division of Cancer Sciences, Faculty of Biology, Medicine and Health, The University of Manchester, The Christie Proton Therapy Centre,

70 *The Christie NHS Foundation Trust, Wimslow Rd, Manchester M20 4BX*

K.J. Kirkby, M. Merchant

Maxeler Technologies Limited, 3 Hammersmith Grove, London W6 0ND, UK
T. Becker

Department of Oncology, University of Oxford, Old Road Campus Research Building, Roosevelt Drive, Oxford, OX3 7DQ, UK

75

A. Giaccia, E.M. Hammond

Department of Physics, University of Surrey, 388 Stag Hill, Guilford, GU2 7XH, UK
G. Schettino

School of Physical and Chemical Sciences, Queen Mary University of London, Mile End, London E1 4NS, UK

80 P. Hobson

Rosalind Franklin Institute, Harwell Campus, Didcot, OX11 0QX, UK
L. Holland, A. Kirkland

STFC Daresbury Laboratory, Daresbury, Cheshire, WA4 4AD, UK
J. Clarke, H. Owen

85 *Central Laser Facility, STFC Rutherford Appleton Laboratory, Harwell Oxford, Didcot OX11 0QX, UK*

H. Ahmed, R. Pattathil

ISIS Neutron and Muon Source, STFC Rutherford Appleton Laboratory, Harwell Oxford, Didcot OX11 0QX, UK

x Lagrange, C.T. Rogers, J.W.G. Thomason

90 *Particle Physics Department, STFC Rutherford Appleton Laboratory, Harwell Oxford, Didcot OX11 0QX, UK*

B. Smart

STFC Daresbury Laboratory, Daresbury, Cheshire, WA4 4AD, UK

N. Bliss, A. Vikhoreva

Department of Physics, SUPA, University of Strathclyde, Glasgow G4 0NG, UK

95 M. Alderton, R. Bingham, R. Gray, P. McKenna, D. Spiers

Department of Biomedical Sciences, Faculty of Science and Engineering, Swansea University, Singleton Park, Swansea, SA2 8PP

R.P. Hugtenburg

Department of Physics, Faculty of Science and Engineering, Swansea University, Singleton Park, Swansea, SA2 8PP

100

C. J. Baker, M. Charlton, S. Eriksson, A. Isaac, O. Nicholas, P. Ruksasakchai