## List of Abbreviations

MC Monte Carlo

**EBT** External Beam Radiotherapy

LINAC Linear accelerator

**ICRU** International commission on radiation units

and Measurement

**PBC** Pencil beam convolution algorithm

**AAA** Analytical Anisotropic Algorithm

**ENIAC** Electronic Numerical Integrator and computer

**IBM** International business Machines

NIST National Institute of Standards and Technology

**ITS** Integrated Tiger Series

MCNP Monte Carlo N-particle

**GEANT** Geometry and Tracking

**CERN** European Organization for Nuclear Research

**PENELOPE** Penetration and Energy Loss of positrons and Electrons

**EGS** Electron Gamma Shower

**SLAC** Stanford Linear Accelerator center

NRC National Research council Canada

PEASTA Parameter Reduced Electron Stepping Algorithm

**IMRT** Intensity Modulated Radiation therapy

**CAD** Computer Aided Design

CM Component Module

MLC Multileaf collimator

**PEGS** Preprocessor for Electron Gamma Shower

**FWHM** Full width at half maximum

 $\mathbf{d}_{\max}$  Depth of maximum dose on central axis

**D**<sub>max</sub> Maximum dose at central axis

Gy/inc e Gray per incident electron on target

**cm** Centimeter

**mm** millimeter

**PDD** Percentage Depth dose

**SSD** Source to surface distance

**FF** Flattening filter

**FFF** Flattening filter free

Δ X Lateral difference between experimentally measured

and MC calculated dose profile in mm

Δ P Lateral difference between experimentally measured

and MC calculated penumbra in mm

 $S_{cp}$  Total scatter factor