

Dedicated to Maa and Papa
for their unconditional love and support...

Declaration by Candidate

I, **Ankita Bhagawati**, declare that the thesis entitled “**Ion acceleration using intense laser interaction on a spherical plasma target** ” is a record of the work done by me under the supervision of **Prof. Nilakshi Das**. I, hereby, confirm that the content of this thesis has not been used to present any previous research degree to me or to anybody else to the best of my knowledge. This work was done wholly while in candidature for a degree in Doctor of Philosophy at Tezpur University. No part of this thesis has previously been submitted for a research degree or any other qualification at this University or any other institution.

This thesis is being submitted to the Tezpur University for the degree of Doctor of Philosophy in Physics.

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This is to certify that the thesis entitled “**Ion acceleration using intense laser interaction on a spherical plasma target**”, submitted to the School of Sciences, Tezpur University in partial fulfilment of the requirements for the award of the degree of **Doctor of Philosophy in Physics** is a record of original research work carried out by **Ms. Ankita Bhagawati** under my supervision and guidance.

All help received by her from various sources have been duly acknowledged.

No part of the thesis has been submitted elsewhere for award of any other degree.

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Certificate by the External Examiner and ODEC

This is to certify that the thesis entitled “**Ion acceleration using intense laser interaction on a spherical plasma target**”, submitted by **Ms. Ankita Bhagawati** to the **Department of Physics** under the School of Sciences, Tezpur University in partial fulfilment for the award of the degree of **Doctor of Philosophy** in **Physics** has been examined by us on/...../..... and found to be satisfactory.

The committee recommends for the award of the **Doctor of Philosophy**.

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List of Figures

1.1	Dose deposition curve for different entities	5
1.2	Radiation-therapy versus proton-therapy	5
1.3	A schematic of the experimental set-up of the proton radiography technique using lasers-plasma interaction and an ionographic image of a spider web with insects attached . .	7
1.4	Fast ignition of fusion fuel using laser accelerated proton beam	9
1.5	Electron trajectory in presence of (a) a plane-polarized wave and (b) a circularly polarized wave	14
1.6	Ponderomotive force on electrons in presence of a Gaussian pulse	18
1.7	Typical temporal profile of an intense ultrashort laser pulse	21
1.8	resonance absorption of a p-polarized laser in long density gradient plasma	23
1.9	Vacuum/Brunel heating mechanism of a p-polarized laser in short density gradient plasma	25
1.10	TNSA mechanism with the intense laser irradiating a solid target of micron sized thickness	27
1.11	RPA mechanism with an intense laser pulse irradiating a solid foil target (a) Hole-boring (b) Light-Sail mechanisms .	30
1.12	A typical time-cycle of the PIC simulation	40
1.13	A typical Yee cell	41
1.14	The leap-frog integration scheme	43
1.15	First order weighting process to calculate the charge densities	44
2.1	A schematic of the simulation model	66
2.2	The longitudinal electric field along the central laser axis .	68

2.3	The proton energy spectrum at different times for the target with density $5n_c$ and diameter $5\mu m$	69
2.4	The proton density distribution in the central YZ plane . .	69
2.5	The normalized axial electric field variation along the laser propagation direction Z and time	70
2.6	The proton density distribution in the central YZ plane (a1-a2)	71
2.7	(a) The spatio-temporal evolution of the longitudinal electric field along the central laser axis. (b) is the proton energy spectra at different times	71
2.8	(a) The proton density distribution in the central YZ plane at time 355.5 fs; and (b) the proton energy spectra at different times	72
2.9	(a) The proton density distribution in the central YZ plane and (b) the axial momentum p_z along Z are	73
2.10	The electron density distribution in the central YZ plane at 215 fs	74
2.11	The longitudinal electron phase space plots along the propagation axis Z for the target	75
2.12	For the target with $10\mu m$ diameter and density $5n_c$: The proton density distribution in the central YZ	75
3.1	The variation of maximum proton energy with the pre-pulse strength	89
3.2	The longitudinal proton momenta along Z for four different cases	90
3.3	(a)The longitudinal electron momentum and (b) the transverse electron momentum along the propagation direction Z	92
3.4	The proton longitudinal momentum and distribution at the central layer	94

3.5	(a) The proton density along the laser axis for different times for the target	95
3.6	(a) The proton density plot in the central YZ plane for the target with linear density gradient	97
3.7	The longitudinal electric field in the central YZ plane at (a)300 fs and (c) 338 fs	99
3.8	The proton energy spectra comparing different peak densities having a linear density gradient	100
3.9	For the target with Gaussian density profile and peak density $n_p = 15n_c$, the proton density	101
3.10	(a) shows the divergence of the protons (in degrees) at 275 fs.	102
3.11	The longitudinal electric field in the central YZ plane along Z	103
3.12	(a) The comparison between the electron energies at 190fs for three different density types	105
4.1	The longitudinal electric field (E_z) (black-solid line), proton density (n_p) (blue-dashed line) and the electron density (n_e) (red-dotted line)	117
4.2	The electron energy spectra at 199.5 fs	118
4.3	The proton density in the central YZ plane at time 322.3 fs and the proton energy spectra at different times	118
4.4	The electron density (a-c) and the proton density (d-f) in the central YZ plane	120
4.5	The proton energy spectra at the saturation times for the cases	121
5.1	(a) The density profiles of the target with varying central peak densities	129
5.2	(a) is the longitudinal phase plot along the laser axis (Z) at different times	130

5.3	(a) and (c) are the axial electric field and the proton density along the central laser axis	132
5.4	(a) The proton density snapshot along the central YZ plane at the shock formation time 230 fs	134
5.5	(a) The proton energy spectra at different times; (b) the angular divergence of the protons	134
5.6	(a) The longitudinal electric field along the central laser axis at time 212.5 fs	136
5.7	The electron energy spectra at 214.9 fs for the spherical and the flat foil target	137
5.8	Electron density distribution in the central YZ plane for the (a) LP and (b) CP cases	138
5.9	The proton density in the central YZ plane at times	140
5.10	(a) The longitudinal phase plot at the shock formation time 252.6 fs.	141
5.11	(a-b) The maximum proton energy at the shock formation time for the different cases	141
5.12	(a-c) The temporal evolution of the longitudinal electric field along the central laser axis for the targets	143
5.13	(a) The three regimes of ion acceleration are marked in space consisting of n_{peak} and a_0	144