

Index

A

Active Galactic Nuclei (AGN), 12, 13, 45

B

Bremsstrahlung, 1, 19, 20

C

Cluster merger, 2, 4, 70, 77, 92

Cool core clusters, 1, 2, 6

Cosmic ray electron, 1, 4, 6, 66, 69, 77

Cosmic ray proton, 4, 6

E

Equipartition, 13, 14, 66, 68, 97, 111–113, 124, 125

External pressure, 13, 14, 97, 112, 113, 124, 125

F

Fanaroff-Riley Class I (FRI), 10, 14, 97

Fanaroff-Riley Class II (FRII), 10, 14, 80, 82, 126

Faraday depth, 7, 15, 20, 22, 42, 43, 115–117, 120, 121, 125–127

Faraday dotation, 6, 20, 113, 125

Faraday thick, 43–45, 120, 125, 126

Faraday thin, 43, 45, 115, 116, 120, 121, 126

Feedback, 13

G

Giant Meter-Wave Radio Telescope (GMRT), 37, 46, 52, 53, 58–60, 65, 69, 78, 84, 88, 89

Giant radio galaxies, 14, 15, 68, 69, 82, 97, 125

H

Hadronic model, 4, 6

I

Instrumental polarisation, 113, 115, 120, 121

Interferometry, 33, 35

Internal pressure, 13, 15, 97, 110–113, 124, 125

Intra-cluster medium, 1, 2, 4, 6, 7, 13, 66, 70, 77

Inverse compton, 98, 125

J

Jet, 9–14, 97, 98, 106–108, 112, 113, 115, 116, 124, 125

K

Karoo Array Telescope (KAT-7), 47, 52, 53, 57, 65

L

Lobe, 10, 13–15, 82–84, 93, 94, 97, 98, 106–108, 112, 113, 115, 120, 124–126

LOW Frequency ARray (LOFAR), 15, 37, 46, 92, 94, 97–99, 101, 106, 113, 116, 117, 120, 126

M

Magnetic field, 1, 4, 6–8, 13–15, 18, 20–22, 66, 68, 70, 72, 73, 111, 112, 121, 125

N

Non cool core clusters, 1, 2

P

Polarisation, 6, 9, 15, 18, 20–22, 42–45, 113, 115, 116, 120, 125, 126

Pressure, 13–15, 98, 112, 113, 125, 126

Q

QU fitting, 43, 45, 120, 121

R

Radio galaxy, 9–11, 13–15, 70, 80, 82, 84, 86, 94, 124

Radio halo, 3, 4, 6, 7, 65, 66, 77, 78, 89–92

Radio relic, 3, 4, 68–71

Reacceleration model, 6, 7, 77, 92

Relaxation parameter, 2, 51, 77, 78

Rotation measure, 7, 15, 115, 116, 125

Rotation measure synthesis, 113, 115, 116, 120, 125

S

Shock, 4, 66, 69–71, 93, 94

Spectral index, 4, 58, 59, 65, 66, 70, 72, 83, 84, 92, 93, 101, 108, 112, 124

Synchrotron, 4, 6, 7, 15–18, 20

T

The Karl G. Jansky Very Large Array (VLA), 46, 97, 102, 103, 107, 108

U

Ultra Steep Spectrum Radio Halo (USSRH), 92, 93

W

Warm Hot Intergalactic Medium (WHIM), 14, 15, 70–73