

# Overview of MBI at ELETTRA

Some ELETTRA parameters relevant for MBI			
Energy Range	Beam current, nominal	RF frequency	Harmonic number
1.0 - 2.4 GeV	300 mA	499.650 MHz	432

MBI mechanism	Observed	Cured or prevented by	
HOM driven longitudinal CBI	YES	HOM frequency shifting	Cavity temperature tuning and HOM Frequency Shifter
HOM driven transverse CBI	YES	HOM frequency shifting	
Robinson Instability	NO	Fundamental mode detuning	$f_{cav,LO} < f_{RF}$
Resistive wall instability	"Resistive wall-like" signals have been observed in the beam spectrum but the pattern differs from theory.		Increasing tune spread acting on harmonic sextupoles
Ion instability	Only during vacuum conditioning		Clearing gap in the bunch train, so the machine is 80-90% filled