

## Experiments performed at the GSI accelerators in 2005

compiled by Magdalena Górska, beam time coordinator 2005

\*In all tables 1 shift represents 8 hours of beam delivered to an experiment running in either main or parasitic mode.

Exp	Short title	Spokesperson	Status	Area	Ion	Shifts*
U068	Bolometric Detectors	Egelhof	main	X8	$^{12}\text{C}$	4
U074	Energy loss of ions in dense plasmas	Blazevic	parasitic	Z6	$^{40}\text{Ar}$	15
U114	Multiple ionization	Hagmann	main	X4	$^{54}\text{Cr}$	13
U120	Electron spectroscopy	Hagmann	parasitic	X4	$^{48}\text{Ca}$ , $^{197}\text{Au}$	11
U161	Electron spectroscopy	Hagmann	parasitic	X4	$^{48}\text{Ca}$ , $^{40}\text{Ar}$ , $^{20}\text{Ne}$	11
U165	Molecular fragmentation	Lutz	main	X4	$^{136}\text{Xe}$ , $^{197}\text{Au}$	15
U182	Element 106 and 108 Chemistry	Kratz	main	X1	$^{40}\text{Ar}$	12
U184	Heavy elements	Hofmann	main	Y7	$^{20}\text{Ne}$ , $^{48}\text{Ca}$	181
U189	Projectile spectroscopy	Rosmej	parasitic	Z6	$^{48}\text{Ca}$	15
U190	Stopping power measurements	Golubev	parasitic	Z6	$^{12}\text{C}$ , $^{40}\text{Ar}$	12
U201	Commissioning of SHIPTRAP	Quint	main	Y7	$^{58}\text{Ni}$	9
U205	Decay properties near $Z=108$ and $N=162$	Tuerler	main	X1	$^{48}\text{Ca}$ , $^{26}\text{Mg}$	57
U206	Rn isotopes	Andreyev	main	Y7	$^{52,54}\text{Cr}$	35
U207	Optical spectroscopy of Nobeium	Hessberger	main	Y7	$^{52}\text{Cr}$ , $^{58}\text{Ni}$	27
U209	Nuclear Structure Investigations No, Lr	Hessberger	main	Y7	$^{48}\text{Ca}$	34
U210	$\alpha$ -emitters in the transuranium region	Novikov	main	X1	$^{12}\text{C}$	11
U211	Even-even nucleus $^{260}\text{Sg}$	Sulignano	main	Y7	$^{54}\text{Cr}$	59
U213	Ion-plasma interaction	Blazevic	parasitic	Z6	$^{26}\text{Mg}$ , $^{54}\text{Cr}$	14
U216	ERDA: Oxide Layers on stainless steel	Bender	main	UU	$^{48}\text{Ca}$ , $^{136}\text{Xe}$	11
UBIO	Radiobiology	Scholz	parasitic	X6	$^{12}\text{C}$ , $^{48}\text{Ca}$ , $^{54}\text{Cr}$ , $^{238}\text{U}$ $^{124}\text{Sn}$ , $^{136}\text{Xe}$ , $^{152}\text{Sm}$	45
UMAT	Material Science	Trautmann /Fischer	main	X0	$^{238}\text{U}$ , $^{12}\text{C}$ , $^{58}\text{Ni}$ , $^{78}\text{Kr}$ $^{124}\text{Sn}$ , $^{197}\text{Au}$ , $^{208}\text{Pb}$	64

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S104	Actinides by fragmentation	Schmidt	parasitic	HFS	$^{197}\text{Au}$ , $^{208}\text{Pb}$	17
S188	Dipole strength in Ni isotopes	Aumann	main	FRS/HTC	$^{40}\text{Ar}$	7
S214	Bound states of eta and omega	Gillitzer	main	HFS	$^2\text{D}$	33
S247	Nuclear density distributions	Khanzadeev	main	FRS/HTC	$^{12}\text{C}$	30
S249	Precise measurement of stopping powers	Golubev	parasitic	HTA	$^{238}\text{U}$	9
S251	FOPI upgrade	Herrmann	parasitic	HTB	$^{58}\text{Ni}$ , $^{86}\text{Kr}$	1
S258	Gas catcher for FRS	Savard	main	HFS	$^{58}\text{Ni}$	22
S260	AMS	Ting	main	HTA	$^{197}\text{Au}$	8
S262	Dileptons	Salabura	parasitic	HAD	$^{14}\text{N}$	9
S269	RISING	Reiter	main	HFS	$^{48}\text{Ca}$ , $^{40}\text{Ca}$ , $^{86}\text{Kr}$ , $^{132}\text{Xe}$	63
S271	Two proton decay of $^{19}\text{Mg}$	Mukha	parasitic	HFS	$^{12}\text{C}$	3
S280	RD on synthetic diamond detectors	Berdermann	parasitic	HTA	$^1\text{H}$	4
S282	Two-photon decay in heavy He-like ions	Dunford	main	HTA	$^{208}\text{Pb}$	18
S283	Spectroscopic investigation of $^{69}\text{Br}$	Becker	main	HFS	$^{78}\text{Kr}$	21
S285	Triaxiality in even-even core nuclei	Saito	main	HFS	$^{152}\text{Sm}$	20
S287	Dipole strength in Ni isotopes	Aumann	main	FRS/HTC	$^{58}\text{Ni}$ , $^{86}\text{Kr}$	48
S291	Radioactivity induced by U ions	Mustafin	main	HTA	$^{238}\text{U}$	8
S295	Photodissociation experiments	Zilges	main	FRS/HTC	$^{94}\text{Mo}$	24
S297	Strange Barions/ Kaonic Clusters	Herrmann	main	HTB	$^2\text{D}$ , $^{27}\text{Al}$ , $^1\text{H}$	79
S301	HADES	Salabura	parasitic	HAD	$^{12}\text{C}$ , $^{40}\text{Ar}$ , $^{40}\text{Ca}$ , $^{27}\text{Al}$	88
S302	HED matter with intense beams	Mintsev	parasitic	HHT	$^{238}\text{U}$	24
S308	g-factor of the $11^-$ isomer in $^{196}\text{Po}$	Maj	main	HFS	$^{238}\text{U}$	16
S310	g-factor of isomeric states near $^{100}\text{Sn}$	Balabanski	main	HFS	$^{136}\text{Xe}$	20
S311	g-factors of isomeric states	Neyens	main	HFS	$^{124}\text{Sn}$ , $^{238}\text{U}$	27
SBIO	Biophysics experiments	Scholz/Schardt	main	HTA	$^{12}\text{C}$	28
SMAT	Material science	Trautmann	parasitic	HTA	$^{86}\text{Kr}$ , $^{181}\text{Ta}$	1

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E012	Direct mass measurement	Wollnik	main	ESR/HFS	$^{238}\text{U}$	20
E013/E017	Beta decay of highly charged ions	Bosch	main	ESR	$^{152}\text{Sm}$	15
E039	Precision X-ray spectroscopy	Beyer	main	ESR	$^{238}\text{U}$	17
E043	Charge transfer from complex targets	Braeuning-Demian	main	X4	$^{238}\text{U}$	9
E049	Beta decay of highly charged ions	Bosch	main	ESR	$^{152}\text{Sm}$	13
E052	Deceleration of highly charged ions	Dauvergne	main	ESR	$^{238}\text{U}$	14
E056	Storage lifetimes and cross-sections	Dubois	main	ESR	$^{132}\text{Xe}$ , $^{238}\text{U}$	24
E062	Measurement of p,gamma rates	Heil	main	ESR	$^{136}\text{Xe}$	18
E064	Light-ion induced reactions in storage rings	Chartier	main	ESR	$^{78}\text{Kr}$ , $^{136}\text{Xe}$	13
E065	DR isotopic shift	Brandau	main	ESR	$^{142}\text{Nd}$ , $^{152}\text{Nd}$	23
E067	Test of time dilatation	Karpuk	main	ESR	$^7\text{Li}$	10