

JUAS - TIMETABLE 2020 - WEEK 1

Schedule 2020	Monday Jan 13	Tuesday Jan 14	Wednesday Jan 15	Thursday Jan 16	Friday Jan 17
09:00					
		Relativity <i>H. Henke</i>	Electro-magnetism <i>H. Henke</i>	Intro. to Accelerator Design <i>Ph. Bryant</i>	Intro. to the Mini-Workshop <i>Ph. Bryant</i>
10:00 10:15		Coffee Break	Coffee Break	Coffee Break	Coffee Break
		Relativity <i>H. Henke</i>	Electro-magnetism <i>H. Henke</i>	Intro. to Accelerator Design <i>Ph. Bryant</i>	Intro. to the Mini-Workshop <i>Ph. Bryant</i>
11:15		Relativity <i>H. Henke</i>	Electro-magnetism <i>H. Henke</i>	Intro. to Accelerator Design <i>Ph. Bryant</i>	Bus leaves at 11:15 from JUAS (Lunch at CERN, R3, offered by ESI)
	12:00 OFFICIAL OPENING (welcome & building visit)	Relativity <i>H. Henke</i>	Electro-magnetism <i>H. Henke</i>	Intro. to Accelerator Design <i>Ph. Bryant</i>	
12:15	13:00 WELCOME LUNCH	BREAK	BREAK	BREAK	
14:00	14:00 Presentation of JUAS & Introduction of students <i>P. Lebrun</i>	Relativity <i>H. Henke</i>	Electro-magnetism <i>H. Henke</i>	Intro. to Accelerator Design <i>Ph. Bryant</i>	13:30 Visit of LHC Magnets Test Hall <i>M. Bajko</i>
15:00	History of particle accelerators Seminar <i>V. Vaccaro</i>	Particle optics N. Biancacci	Particle optics N. Biancacci	Intro. to Accelerator Design <i>Ph. Bryant</i>	15:00 Introduction to CERN & its Accelerator Network Seminar - R. Alemany
16:00 16:15		Coffee Break	Coffee Break	Coffee Break	16:30 Visit of CERN Control Center <i>R. Alemany</i>
	CHECK-IN AT THE RESIDENCE & SHOPPING FOR GROCERIES	Particle optics N. Biancacci	Particle optics N. Biancacci	Intro. to Accelerator Design <i>Ph. Bryant</i>	Bus leaves at 17:30 from CERN
17:15		Particle optics N. Biancacci			
18:15		AFTER WORK AT ESI			

JUAS - TIMETABLE 2020 - WEEK 2

Schedule 2020	Monday Jan 20	Tuesday Jan 21	Wednesday Jan 22	Thursday Jan 23	Friday Jan 24
09:00	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:15	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>
11:15	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Transverse Dynamics <i>A. Latina</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>
12:15	WORKING LUNCH	BREAK	BREAK	BREAK	BREAK
14:00	Intro. to MAD-X <i>G. Sterbini</i>	Transverse Dynamics <i>A. Latina</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>	Transverse Dynamics <i>A. Latina</i>
15:00	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>	Transverse Dynamics <i>A. Latina</i>
16:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
16:15	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>	Cyclotrons <i>B. Jacquot</i>	Linacs <i>D. Alesini</i>	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>
17:15	Hybrid collisions in the LHC <i>J. Jowett</i>		European Projects for Collaborative Accelerator R&D Seminar <i>M. Vretenar</i>		MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2020 - WEEK 3

Schedule 2020	Monday Jan 27	Tuesday Jan 28	Wednesday Jan 29	Thursday Jan 30	Friday Jan 31
09:00	Linear imperfections <i>H. Bartosik</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Bus leaves at 07:00 from JUAS (2 hours of travel by bus) VISIT AT ESRF <i>J-L. Revol</i> (Lunch offered by ESRF)
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
10:15	Linear imperfections <i>H. Bartosik</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	
11:15	Linear imperfections <i>H. Bartosik</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	Synchrotron Radiation <i>R. Ischebeck</i>	
12:15	WORKING LUNCH	BREAK	BREAK	BREAK	
14:00	Synchrotron Radiation <i>R. Ischebeck</i>	Linear imperfections <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	14:00 - 16:00 Injection / Extraction <i>T. Perron</i>
15:00	Synchrotron Radiation <i>R. Ischebeck</i>	Linear imperfections <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	
16:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
16:15	Synchrotron Radiation <i>R. Ischebeck</i>	Linear imperfections <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	Non-linear effects <i>H. Bartosik</i>	Bus leaves at 17:00 from ESRF
17:15		Free-Electron Lasers Seminar (incl. ESIPAP students) <i>E. Prat</i>		LHC & Future High-Energy Circular Collider Seminar (incl. ESIPAP students) <i>O. Bruning</i>	
18:15				AFTER WORK AT ESI	

JUAS - TIMETABLE 2020 - WEEK 4

Schedule 2020	Monday Feb 3	Tuesday Feb 4	Wednesday Feb 5	Thursday Feb 6	Friday Feb 7
09:00	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Space charge <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:15	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Space charge <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>
11:15	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Space charge <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>
12:15	WORKING LUNCH	BREAK	BREAK	BREAK	BREAK
14:00	Space charge <i>M. Migliorati</i>	Space charge <i>M. Migliorati</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
15:00	Space charge <i>M. Migliorati</i>	Space charge <i>M. Migliorati</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
16:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
16:15	Space charge <i>M. Migliorati</i>	Space charge <i>M. Migliorati</i>	Longitudinal Dynamics <i>E. Métral/B. Salvant</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
17:15			Novel High Gradient Particle Accelerators Seminar <i>R. Assmann</i>	Future High-Energy Linear Colliders Seminar <i>(incl. ESIPAP students)</i> <i>L. Rinolfi</i>	
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2020 - WEEK 5

Schedule 2020	Monday Feb 10	Tuesday Feb 11	Wednesday Feb 12	Thursday Feb 13	Friday Feb 14
09:00	Free for preparation of examinations	EXAMINATION Synchrotron Radiation <i>Written session</i>	EXAMINATION Transverse beam dynamics <i>Written session</i>	EXAMINATION Longitudinal beam dynamics <i>Written session</i>	
10:30		Coffee Break	Coffee Break	Coffee Break	
11:00		EXAMINATION Linacs <i>Written session</i>	EXAMINATION Linear imperfections <i>Written session</i>	DISCUSSION SUMMARY OF JUAS LECTURES	
12:30		BREAK	BREAK	JUAS CLOSING COURSE 1 LUNCH OFFERED BY ESI	
14:00		Free for preparation of examinations			
15:00					
16:00 16:15					
17:15					

JUAS - TIMETABLE 2020 - WEEK 6

Schedule 2020	Monday Feb 17	Tuesday Feb 18	Wednesday Feb 19	Thursday Feb 20	Friday Feb 21
09:00		Introduction to RF <i>A. Mostacci</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>
10:00 10:15		Coffee Break	Coffee Break	Coffee Break	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>
		Introduction to RF <i>A. Mostacci</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	Coffee Break
11:15		Introduction to RF <i>A. Mostacci</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	Bus leaves at 11:30 from JUAS (Lunch at CERN, R2, offered by ESI)
12:15	12:00 OFFICIAL OPENING (welcome & building visit)				
	13:00 WELCOME LUNCH	BREAK	BREAK	BREAK	
14:00	14:00 Presentation of JUAS & Introduction of students <i>P. Lebrun</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	Vacuum systems <i>V. Baglin / R. Kersevan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	
15:00 15:15	Coffee Break	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	VISIT AT CERN AD / ELENA LINAC 4 Vacuum lab
16:00 16:15	Introduction to CERN practical days <i>Magnet, Superconductivity, RF, Vacuum, CLEAR</i>	Coffee Break	Coffee Break	Coffee Break	
		RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	RF Engineering <i>F. Caspers / M. Wendt / M. Bozzolan</i>	
17:15	CHECK-IN AT THE RESIDENCE & SHOPPING FOR GROCERIES	Particle accelerators, instruments of discovery in physics - Seminar (incl. ESIPAP students) - <i>Ph. Lebrun</i>	Accelerator driven system Seminar (incl. ESIPAP students) <i>M. Baylac</i>	EIC project and opportunities Seminar <i>F. Meot</i>	Bus leaves at 17:30 from CERN
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2020 - WEEK 7

Schedule 2020	Monday Feb 24	Tuesday Feb 25	Wednesday Feb 26	Thursday Feb 27	Friday Feb 28
09:00	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Bus leaves at 8:00 from JUAS (4 hours of travel by bus) VISIT AT PSI <i>(Lunch, dinner and coffee breaks offered by PSI, night at PSI offered by ESI)</i>	VISIT AT PSI <i>(Lunch and coffee breaks offered by PSI)</i>
10:00	Coffee Break	Coffee Break	Coffee Break		
10:15	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>		
10:30	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>		
11:15	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Accelerator Controls <i>E. Zimoch</i>	Bus leaves at 14:30 from PSI (4 hours of travel by bus)
12:15	WORKING LUNCH	BREAK	BREAK		
14:00	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>	Beam instrumentation <i>P. Forck</i>		
15:00	Superconducting RF Cavities <i>F. Caspers</i>	Superconducting RF Cavities <i>F. Caspers</i>	Superconducting RF Cavities <i>F. Caspers</i>		
16:00	Coffee Break	Coffee Break	Coffee Break	Accel. for hadron therapy Seminar <i>M. Schippers</i>	Novel Accelerators on a chip Seminar <i>B. Hermann</i>
16:15	Superconducting RF Cavities <i>F. Caspers</i>	Superconducting RF Cavities <i>F. Caspers</i>	Superconducting RF Cavities <i>F. Caspers</i>		
17:15			Building Large Accelerators Seminar <i>Ph. Lebrun</i>		
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2020 - WEEK 8

Schedule 2020	Monday Mar 2	Tuesday Mar 3	Wednesday Mar 4	Thursday Mar 5	Friday Mar 6
09:00	9:00 - 10:30 Introduction to Magnets <i>G. De Rijk</i>	Superconducting magnets <i>P. Ferracin</i>	Mini-workshop Normal conducting Magnets <i>J. Bauche & T. Zickler</i>	Bus leaves at 8:00 from JUAS (Lunch at CERN, offered by ESI) PRACTICAL DAYS AT CERN RF coordinators: <i>F. Caspers</i> <i>M. Wendt</i> <i>M. Bozzolan</i> VACUUM coordinators: <i>V. Baglin</i> <i>R. Kersevan</i> MAGNET coordinators: <i>J. Bauche</i> <i>L. Fiscarelli</i> SUPERCONDUCTIVITY coordinator: <i>J. Fleiter</i> CLEAR coordinators: <i>R. Corsini</i> <i>W. Farabolini</i> Bus leaves at 17:30 from CERN	Bus leaves at 8:00 from JUAS (Lunch at CERN, offered by ESI) PRACTICAL DAYS AT CERN RF coordinators: <i>F. Caspers</i> <i>M. Wendt</i> <i>M. Bozzolan</i> VACUUM coordinators: <i>V. Baglin</i> <i>R. Kersevan</i> MAGNET coordinators: <i>J. Bauche</i> <i>L. Fiscarelli</i> SUPERCONDUCTIVITY coordinator: <i>J. Fleiter</i> CLEAR coordinators: <i>R. Corsini</i> <i>W. Farabolini</i> Bus leaves at 17:30 from CERN
10:00		Coffee Break	Coffee Break		
10:15	Coffee Break	Superconducting magnets <i>P. Ferracin</i>	Mini-workshop Normal conducting Magnets <i>J. Bauche & T. Zickler</i>		
11:15	10:45 - 12:15 Normal Conducting magnets <i>T. Zickler</i>	Superconducting magnets <i>P. Ferracin</i>	Mini-workshop Normal conducting Magnets <i>J. Bauche & T. Zickler</i>		
12:15	WORKING LUNCH	BREAK	BREAK		
14:00	Normal Conducting magnets <i>T. Zickler</i>	Cryogenics for Superconducting Devices <i>Ph. Lebrun</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & D. Schoerling</i>		
15:00	Normal Conducting magnets <i>T. Zickler</i>	Normal Conducting magnets <i>T. Zickler</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & D. Schoerling</i>		
16:00	Coffee Break	Coffee Break	Coffee Break		
16:15	Superconducting magnets <i>P. Ferracin</i>	Normal Conducting magnets <i>T. Zickler</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & D. Schoerling</i>		
17:15	Superconducting magnets <i>P. Ferracin</i>	Normal Conducting magnets <i>T. Zickler</i>			
18:15					

JUAS - TIMETABLE 2020 - WEEK 9

Schedule 2020	Monday March 9	Tuesday March 10	Wednesday March 11	Thursday March 12	Friday March 13
09:00	Particle Sources <i>T. Thuillier</i>	Low Energy Electron Accelerators <i>W. Mondelaers</i>	Survey and Alignment of Accelerators <i>H. Mainaud-Durand</i>	Life-cycle and operability of particle accelerators <i>S. Meyroneinc</i>	High Power Proton Linacs <i>S. Bousson</i>
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:15	Particle Sources <i>T. Thuillier</i>	Low Energy Electron Accelerators <i>W. Mondelaers</i>	Survey and Alignment of Accelerators <i>H. Mainaud-Durand</i>	Life-cycle and operability of particle accelerators <i>S. Meyroneinc</i>	High Power Proton Linacs <i>S. Bousson</i>
11:15	Particle Sources <i>T. Thuillier</i>	Low Energy Electron Accelerators <i>W. Mondelaers</i>	Survey and Alignment of Accelerators <i>H. Mainaud-Durand</i>	Life-cycle and operability of particle accelerators <i>S. Meyroneinc</i>	High Power Proton Linacs <i>S. Bousson</i>
12:15	BREAK	BREAK	SANDWICH SNACK OFFERED BY ESI	SANDWICH SNACK OFFERED BY ESI	LUNCH OFFERED
14:00	Particle Sources <i>T. Thuillier</i>	Acc. for medical & industrial applications <i>W. Kleeven</i>	VISIT & EXPERIMENTAL WORK AT BERGOZ INSTRUMENTATION <i>E. Touzain</i>	<i>Bus leaves at 13:15 from JUAS</i>	Radiation safety <i>X. Queralt</i>
15:00	Particle Sources <i>T. Thuillier</i>	Acc. for medical & industrial applications <i>W. Kleeven</i>		Radiation Oncology : Biology, Physics & Clinical Applications Seminar <i>P. Tsoutsou</i>	Radiation safety <i>X. Queralt</i>
16:00	Coffee Break	Coffee Break		Therapeutic Applications at Geneva Hospital	Coffee Break
16:15	Energy recovery linacs Seminar <i>M. Arnold</i>	Acc. for medical & industrial applications <i>W. Kleeven</i>	<i>Bus leaves at 17:30 from BERGOZ</i>	<i>Bus leaves at 17:30 from HUG</i>	Radiation safety <i>X. Queralt</i>
17:15					

JUAS - TIMETABLE 2020 - WEEK 10

Schedule 2020	Monday March 16	Tuesday March 17	Wednesday March 18	Thursday March 19	Friday March 20	
09:00	Presentation of reports on practical work	EXAMINATION Beam Instrumentation <i>Written session</i>	EXAMINATION RF <i>Written session</i>	EXAMINATION Magnets <i>Written session</i>		
10:30 11:00		Coffee Break	Coffee Break	Coffee Break		
11:00	Presentation of reports on practical work	EXAMINATION Subject TBD <i>Written session</i>	EXAMINATION Subject TBD <i>Written session</i>	DISCUSSION SUMMARY OF JUAS LECTURES		
12:30		WORKING LUNCH	BREAK	BREAK		JUAS CLOSING COURSE 2 LUNCH OFFERED BY ESI
14:00	Free for preparation of examinations					
15:00						
16:00 16:15						
17:15						