

JUAS - TIMETABLE 2019 - WEEK 1

Schedule 2019	Monday Jan 7th	Tuesday Jan 8th	Wednesday Jan 9th	Thursday Jan 10th	Friday Jan 11th	
09:00		Relativity lecture <i>H. Henke</i>	Electro-magnetism lecture <i>H. Henke</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	Intro. to the Mini-Workshop lecture <i>Ph. Bryant</i>	
10:00 10:15		Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11:15		Relativity tutorial <i>H. Henke</i>	Electro-magnetism lecture <i>H. Henke</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	Intro. to the Mini-Workshop lecture <i>Ph. Bryant</i>	
		Relativity lecture <i>H. Henke</i>	Electro-magnetism tutorial <i>H. Henke</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	Bus leaves at 11:15 from JUAS (Lunch at CERN, R1, offered by ESI)	
12:15		12:00 OFFICIAL OPENING (welcome & building visit)				
14:00		13:00 WELCOME LUNCH	BREAK	BREAK	BREAK	13:30 Visit of LHC Magnets Test Hall
		14:00 Presentation of JUAS & Introduction of students <i>P. Lebrun</i>	Relativity lecture <i>H. Henke</i>	Electro-magnetism lecture <i>H. Henke</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	15:00 Introduction to CERN & its Accelerator Network Seminar - R. Alemany
15:00		History of particle accelerators Seminar <i>V. Vaccaro</i>	Particle optics lecture <i>J.M. De Conto</i>	Particle optics tutorial <i>J.M. De Conto</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	16:30 Visit at CERN Control Center Bus leaves at 17:30 from CERN
16:00 16:15		CHECK-IN AT THE RESIDENCE & SHOPPING FOR GROCERIES	Coffee Break	Coffee Break	Coffee Break	
17:15			Particle optics lecture <i>J.M. De Conto</i>	Particle optics tutorial <i>J.M. De Conto</i>	Intro. to Accelerator Design lecture <i>Ph. Bryant</i>	
18:15		Particle optics lecture <i>J.M. De Conto</i>				
		AFTER WORK AT ESI				

JUAS - TIMETABLE 2019 - WEEK 2

Schedule 2019	Monday Jan 14th	Tuesday Jan 15th	Wednesday Jan 16th	Thursday Jan 17th	Friday Jan 18th
09:00	Transverse Dynamics lecture <i>A. Latina</i>	Transverse Dynamics lecture <i>A. Latina</i>	Transverse Dynamics lecture <i>A. Latina</i>	Linacs lecture <i>D. Alesini</i>	Cyclotrons lecture <i>B. Jacquot</i>
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:15	Transverse Dynamics lecture <i>A. Latina</i>	Transverse Dynamics lecture <i>A. Latina</i>	Transverse Dynamics lecture <i>A. Latina</i>	Linacs lecture <i>D. Alesini</i>	Cyclotrons lecture <i>B. Jacquot</i>
11:15	Transverse Dynamics tutorial <i>A. Latina</i>	Transverse Dynamics tutorial <i>A. Latina</i>	Transverse Dynamics tutorial <i>A. Latina</i>	Linacs lecture <i>D. Alesini</i>	Cyclotrons tutorial <i>B. Jacquot</i>
12:15	WORKING LUNCH	BREAK	BREAK	BREAK	BREAK
14:00	Intro. to MAD-X <i>G. Sterbini</i>	Transverse Dynamics lecture <i>A. Latina</i>	Linacs lecture <i>D. Alesini</i>	Cyclotrons lecture <i>B. Jacquot</i>	Transverse Dynamics lecture <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>	Linacs lecture <i>D. Alesini</i>	Cyclotrons tutorial <i>B. Jacquot</i>	Transverse Dynamics lecture <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>	Linacs lecture <i>D. Alesini</i>	Cyclotrons lecture <i>B. Jacquot</i>	MADX <i>N. Fuster Martinez / H. Garcia Morales / A. Latina / G. Sterbini</i>
17:15			European Projects for Collaborative Accelerator R&D <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 2019 - WEEK 3

Schedule 2019	Monday Jan 21st	Tuesday Jan 22nd	Wednesday Jan 23rd	Thursday Jan 24th	Friday Jan 25th	
09:00	<p><i>Bus leaves at 07:30 from JUAS</i></p> <p><i>(2 hours of travel by bus)</i></p> <p>VISIT AT ESRF</p> <p><i>(Lunch offered by ESRF)</i></p>					
10:00		<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>	
10:15		Coffee Break	Coffee Break	Coffee Break	Coffee Break	
11:15		<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>	
12:15		<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>	
14:00		BREAK	BREAK	BREAK	BREAK	
15:00		<p>14:00 - 16:00 Injection / Extraction lecture</p> <p><i>Thomas Perron</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Longitudinal Dynamics lecture</p> <p><i>E. Métral/B. Salvant</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>
16:00			<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>
16:15			Coffee Break	Coffee Break	Coffee Break	Coffee Break
17:15		<p><i>Bus leaves at 17:00 from ESRF</i></p>	<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Linear imperfections lecture</p> <p><i>H. Bartosik</i></p>	<p>Non-linear effects lecture</p> <p><i>H. Bartosik</i></p>
18:15		<p>Free-Electron Lasers Seminar</p> <p><i>E. Prat</i></p>		<p>LHC & Future High-Energy Circular Collider Seminar</p> <p><i>O. Bruning</i></p>		
				AFTER WORK AT ESI		

JUAS - TIMETABLE 2019 - WEEK 4

Schedule 2019	Monday Jan 28th	Tuesday Jan 29th	Wednesday Jan 30th	Thursday Jan 31st	Friday Feb 1st
09:00	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:15	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
11:15	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Presentation of Accelerator Design <i>Students</i>
12:15	WORKING LUNCH	BREAK	BREAK	BREAK	BREAK
14:00	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Instabilities lecture <i>M. Migliorati</i>
15:00	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Instabilities lecture <i>M. Migliorati</i>
16:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
16:15	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Synchrotron Radiation lecture <i>R. Ischebeck</i>	Space charge lecture <i>M. Migliorati</i>	Mini-workshop Accelerator Design <i>Ph. Bryant</i>	Instabilities lecture <i>M. Migliorati</i>
17:15		Future High-Energy Linear Colliders Seminar <i>L. Rinolfi</i>	Novel High Gradient Particle Accelerators Seminar <i>R. Assmann</i>		
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2019 - WEEK 5

Schedule 2019	Monday Feb 4th	Tuesday Feb 5th	Wednesday Feb 6th	Thursday Feb 7th	Friday Feb 8th	
09:00	Free for preparation of examinations	EXAMINATION Synchrotron Radiation <i>Written session</i>	EXAMINATION Longitudinal beam dynamics <i>Written session</i>	EXAMINATION Transverse beam dynamics <i>Written session</i>		
10:30 11:00		Coffee Break	Coffee Break	Coffee Break		
		EXAMINATION topic to be announced <i>Written session</i>	EXAMINATION topic to be announced <i>Written session</i>	DISCUSSION SUMMARY OF JUAS LECTURES		
12:30		WORKING LUNCH	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 2019 - WEEK 6

Schedule 2019	Monday Feb 11th	Tuesday Feb 12th	Wednesday Feb 13th	Thursday Feb 14th	Friday Feb 15th
09:00		Introduction to RF lecture <i>A. Mostacci</i>	Vacuum systems lecture <i>V. Baglin</i>	Vacuum systems lecture <i>V. Baglin</i>	RF Engineering lecture <i>F. Caspers</i>
10:00		Coffee Break	Coffee Break	Coffee Break	RF Engineering tutorial <i>F. Caspers / M. Wendt / M. Bozzolan</i>
10:15		Introduction to RF lecture <i>A. Mostacci</i>	Vacuum systems lecture <i>V. Baglin</i>	Vacuum systems lecture <i>V. Baglin</i>	
11:15		Introduction to RF lecture <i>A. Mostacci</i>	Vacuum systems tutorial <i>V. Baglin / R. Kersevan</i>	Vacuum systems tutorial <i>V. Baglin / R. Kersevan</i>	Bus leaves at 11:30 from JUAS (Lunch at CERN, R2, offered by ESI) VISIT AT CERN AD / ELENA LINAC / LEIR Bus leaves at 18:00 from CERN
12:15	12:00 OFFICIAL OPENING (welcome & building visit)	BREAK	BREAK		
	13:00 WELCOME LUNCH	BREAK	BREAK		
14:00	14:00 Presentation of JUAS & Introduction of students <i>P. Lebrun</i>	RF Engineering lecture <i>F. Caspers</i>	Vacuum systems lecture <i>V. Baglin</i>	RF Engineering lecture <i>F. Caspers</i>	
15:00	Coffee Break	RF Engineering lecture <i>F. Caspers</i>	RF Engineering tutorial <i>F. Caspers / M. Wendt / M. Bozzolan</i>	RF Engineering tutorial <i>F. Caspers / M. Wendt / M. Bozzolan</i>	
15:15	Introduction to CERN practical days <i>Magnet, Superconductivity, RF, Vacuum, CLEAR</i>	Coffee Break	Coffee Break	Coffee Break	
16:00		RF Engineering lecture <i>F. Caspers</i>	RF Engineering lecture <i>F. Caspers</i>	RF Engineering lecture <i>F. Caspers</i>	
16:15		RF Engineering lecture <i>F. Caspers</i>	RF Engineering lecture <i>F. Caspers</i>	RF Engineering lecture <i>F. Caspers</i>	
17:15	CHECK-IN AT THE RESIDENCE & SHOPPING FOR GROCERIES	Particle accelerators, instruments of discovery in physics Seminar - <i>Ph. Lebrun</i>	Accelerator driven system Seminar <i>J-L. Biarotte</i>		
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2019 - WEEK 7

Schedule 2019	Monday Feb 18th	Tuesday Feb 19th	Wednesday Feb 20th	Thursday Feb 21st	Friday Feb 22nd
09:00	Introduction to Magnets lecture A. Milanese 10:30	Superconducting magnets lecture P. Ferracin	Mini-workshop Normal conducting Magnets J. Bauche & T. Zickler	Bus leaves at 8:00 from JUAS (4 hours of travel by bus) VISIT AT PSI (Lunch, dinner and coffee breaks offered by PSI, night at PSI offered by ESI)	VISIT AT PSI (Lunch and coffee breaks offered by PSI)
10:00		Coffee Break	Coffee Break		
10:15	Coffee Break	Superconducting magnets lecture P. Ferracin	Mini-workshop Normal conducting Magnets J. Bauche & T. Zickler		
11:15	10:45 Normal Conducting magnets lecture T. Zickler	Cryogenics for Superconducting Devices lecture Ph. Lebrun	Mini-workshop Normal conducting Magnets J. Bauche & T. Zickler		
12:15	WORKING LUNCH	BREAK	BREAK		
14:00	Normal Conducting magnets lecture - T. Zickler	Superconducting magnets lecture P. Ferracin	Mini-workshop Superconducting Magnets P. Ferracin & P. Lebrun	Accelerator Controls lecture E. Zimoch	
15:00	Normal Conducting magnets lecture - T. Zickler	Normal Conducting magnets lecture - T. Zickler	Mini-workshop Superconducting Magnets P. Ferracin & P. Lebrun		
16:00	Coffee Break	Coffee Break	Coffee Break		
16:15	Superconducting magnets lecture P. Ferracin	Normal Conducting magnets lecture - T. Zickler	Mini-workshop Superconducting Magnets P. Ferracin & P. Lebrun	Accel. for hadron therapy Seminar M. Schippers	Bus leaves at 14:30 from PSI (4 hours of travel by bus)
17:15	Superconducting magnets lecture P. Ferracin	Normal Conducting magnets lecture - T. Zickler	AFTER WORK AT ESI	Novel Accelerators on a chip Seminar B. Hermann	
18:15					

JUAS - TIMETABLE 2019 - WEEK 8

Schedule 2019	Monday Feb 25th	Tuesday Feb 26th	Wednesday Feb 27th	Thursday Feb 28th	Friday March 1st
09:00	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation lecture <i>P. Forck</i>	Bus leaves at 8:00 from JUAS (Lunch at CERN, offered by ESI) PRACTICAL DAYS AT CERN RF coordinator: F. Caspers M. Wendt M. Bozzolan VACUUM coordinator: V. Baglin R. Kersevan MAGNET coordinators: J. Bauche L. Fiscarelli SUPERCONDUCTIVITY coordinator: J. Fleiter CLEAR coordinators: R. Corsini W. Farabolini 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 coordinator: F. Caspers M. Wendt M. Bozzolan VACUUM coordinator: V. Baglin R. Kersevan MAGNET coordinators: J. Bauche L. Fiscarelli SUPERCONDUCTIVITY coordinator: J. Fleiter CLEAR coordinators: R. Corsini W. Farabolini Bus leaves at 17:30 from CERN
10:00	Coffee Break	Coffee Break	Coffee Break		
10:15	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation tutorial <i>P. Forck</i>		
10:30	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation tutorial <i>P. Forck</i>		
11:15	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation lecture <i>P. Forck</i>	Beam instrumentation tutorial <i>P. Forck</i>		
12:15	WORKING LUNCH	BREAK	BREAK		
14:00	Beam instrumentation lecture <i>P. Forck</i>	Superconducting RF Cavities lecture <i>F. Caspers</i>	Superconducting RF Cavities tutorial <i>F. Caspers</i>		
15:00	Beam instrumentation tutorial <i>P. Forck</i>	Superconducting RF Cavities lecture <i>F. Caspers</i>	Superconducting RF Cavities tutorial <i>F. Caspers</i>		
16:00	Coffee Break	Coffee Break	Coffee Break		
16:15	Beam instrumentation tutorial <i>P. Forck</i>	Superconducting RF Cavities lecture <i>F. Caspers</i>	Superconducting RF Cavities lecture <i>F. Caspers</i>		
17:15			Building Large Accelerators Seminar <i>Ph. Lebrun</i>		
18:15			AFTER WORK AT ESI		

JUAS - TIMETABLE 2019 - WEEK 9

Schedule 2019	Monday March 4th	Tuesday March 5th	Wednesday March 6th	Thursday March 7th	Friday March 8th
09:00	Particle Sources lecture <i>T. Thuillier</i>	Low Energy Electron Accelerators lecture <i>W. Mondelaers</i>	<p><i>Bus leaves at 7:30 from JUAS</i></p> <p>(Lunch offered by Bergoz)</p> <p>VISIT AND EXPERIMENTAL WORK AT BERGOZ INSTRUMENTATION</p> <p><i>Bus leaves at 17:00 from BERGOZ</i></p>	Life-cycle and reliability of particle accelerators lecture <i>S. Meyroneinc</i>	High Current Proton Linacs lecture <i>S. Bousson</i>
10:00	Coffee Break	Coffee Break		Coffee Break	Coffee Break
10:15	Particle Sources lecture <i>T. Thuillier</i>	Low Energy Electron Accelerators lecture <i>W. Mondelaers</i>		Life-cycle and reliability of particle accelerators lecture <i>S. Meyroneinc</i>	High Current Proton Linacs lecture <i>S. Bousson</i>
11:15	Particle Sources lecture <i>T. Thuillier</i>	Low Energy Electron Accelerators lecture <i>W. Mondelaers</i>		Life-cycle and reliability of particle accelerators lecture <i>S. Meyroneinc</i>	High Current Proton Linacs lecture <i>S. Bousson</i>
12:15	WORKING LUNCH	BREAK		SANDWICH SNACK OFFERED BY ESI	BREAK
14:00	Particle Sources tutorial <i>T. Thuillier</i>	Acc. for medical & industrial applications lecture <i>W. Kleeven</i>		<i>Bus leaves at 13:30 from JUAS</i>	Radiation safety lecture <i>X. Queralt</i>
15:00	Particle Sources lecture <i>T. Thuillier</i>	Acc. for medical & industrial applications lecture <i>W. Kleeven</i>		Radiation Oncology : Biology, Physics & Clinical Applications Seminar <i>R. Miralbell</i>	Radiation safety lecture <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 lecture <i>W. Kleeven</i>		<i>Bus leaves at 17:30 from HUG</i>	Radiation safety lecture <i>X. Queralt</i>
17:15					AFTER WORK AT ESI

JUAS - TIMETABLE 2019 - WEEK 10

Schedule 2019	Monday March 11th	Tuesday March 12th	Wednesday March 13th	Thursday March 14th	Friday March 15th
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>	The Ariane Odyssey, from Ariane 1 to Ariane 6 Isabelle Rongier <i>ASL</i> & Jan Droz <i>CNES</i>
10:30 11:00		Coffee Break	Coffee Break	Coffee Break	
11:00	Presentation of reports on practical work	EXAMINATION topic to be announced <i>Written session</i>	EXAMINATION topic to be announced <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					