

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>					
		<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>	
10:00		<p>Coffee Break</p>	<p>Coffee Break</p>	<p>Coffee Break</p>	<p>Coffee Break</p>	
10:15		<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>	
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>BREAK</p>	<p>BREAK</p>	<p>BREAK</p>	<p>BREAK</p>	
14:00		<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>
15:00			<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>
16:00			<p>Coffee Break</p>	<p>Coffee Break</p>	<p>Coffee Break</p>	<p>Coffee Break</p>
16:15		<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>
17:15		<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>		
18:15				<p>AFTER WORK AT ESI</p>		

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>
	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:00	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>
10:15	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</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>	Coffee Break
12:15	12:00 OFFICIAL OPENING (welcome & building visit)	BREAK	BREAK	BREAK	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
	13:00 WELCOME LUNCH				
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</i>	RF Engineering tutorial <i>F. Caspers / M. Wendt</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					
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 <i>A. Milanese</i> 10:30	Superconducting magnets lecture <i>P. Ferracin</i>	Mini-workshop Normal conducting Magnets <i>J. Bauche & T. Zickler</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		
10:15		Coffee Break	Superconducting magnets lecture <i>P. Ferracin</i>		
11:15	10:45 Normal Conducting magnets lecture <i>T. Zickler</i>	Cryogenics for Superconducting Devices lecture <i>Ph. Lebrun</i>	Mini-workshop Normal conducting Magnets <i>J. Bauche & T. Zickler</i>		
12:15	WORKING LUNCH	BREAK	BREAK		
14:00	Normal Conducting magnets lecture - <i>T. Zickler</i>	Superconducting magnets lecture <i>P. Ferracin</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & P. Lebrun</i>	Accelerator Controls lecture <i>E. Zimoch</i>	
15:00	Normal Conducting magnets lecture - <i>T. Zickler</i>	Normal Conducting magnets lecture - <i>T. Zickler</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & P. Lebrun</i>		
16:00	Coffee Break	Coffee Break	Coffee Break	Accel. for hadron therapy Seminar <i>M. Schippers</i>	Bus leaves at 14:30 from PSI (4 hours of travel by bus)
16:15	Superconducting magnets lecture <i>P. Ferracin</i>	Normal Conducting magnets lecture - <i>T. Zickler</i>	Mini-workshop Superconducting Magnets <i>P. Ferracin & P. Lebrun</i>		
17:15	Superconducting magnets lecture <i>P. Ferracin</i>	Normal Conducting magnets lecture - <i>T. Zickler</i>		Novel Accelerators Seminar <i>B. Hermann</i>	
18:15		AFTER WORK AT ESI			

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 VACUUM coordinator: V. Baglin 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 VACUUM coordinator: V. Baglin 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>		
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>	<i>Bus leaves at 7:30 from JUAS</i> (Lunch offered by Bergoz) VISIT AND EXPERIMENTAL WORK AT BERGOZ INSTRUMENTATION <i>Bus leaves at 17:00 from BERGOZ</i>	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>		
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						