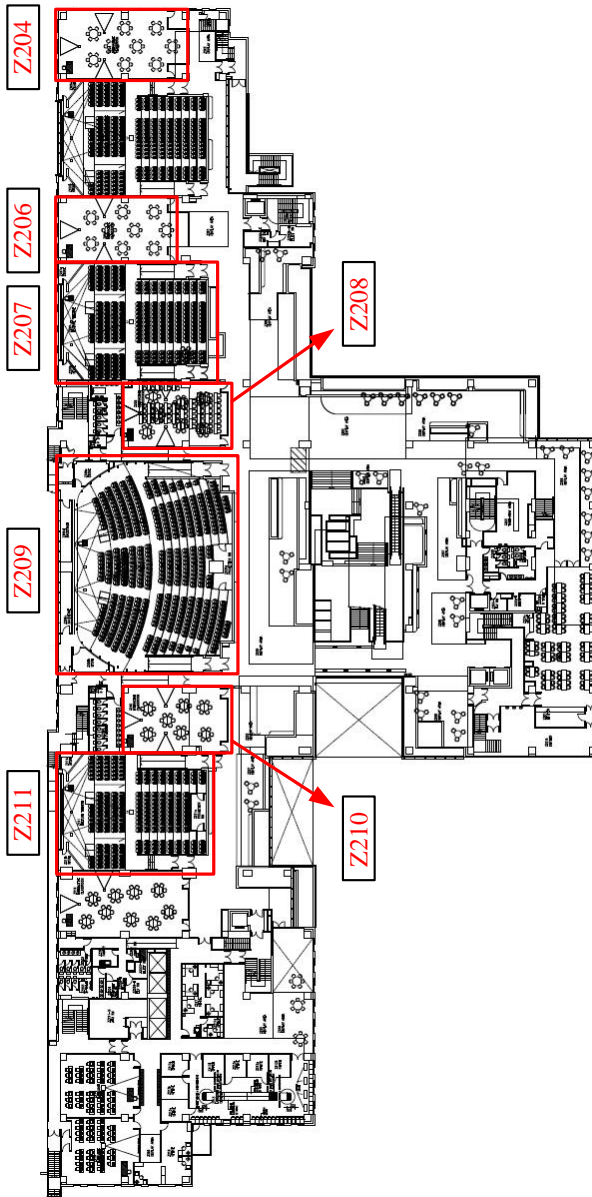


Program overview

Date	Time	Event/Place				
Jun 11, Tuesday	13:30 - 15:00			Group meeting (CIGRE WGs)		
	15:00 - 18:00	Registration				
	Venue	Lobby, 2/f, Block Z				
	18:00 - 21:00	APL 2019 Welcome Reception				
Jun 12, Wednesday	Venue	Z207				
	09:30 - 09:45	Opening Ceremony				
	09:45 - 10:30	Invited Lecture 1				
	10:30 - 11:15	Invited Lecture 2				
	Venue	Lobby, 3/f, Block Z				
	11:15 - 11:45	Group photo				
	Venue	Lobby, 2/f, Block Z			Z206	
	11:45 - 13:30	Lunch			APL SC meeting	
	Venue	Z207	Z211	Z210	Z208	Z206
	13:30 - 15:30	S1-1	S2-1	Exhibition	Exhibition	
	15:30 - 15:45	Coffee Break				
15:45 - 17:45	S3	S4				
Jun 13, Thursday	09:00 - 11:00	S5	S6-1	Poster S1 & Exhibition	Poster S2 & Exhibition	SS
	11:00 - 11:15	Coffee Break				
	11:15 - 12:30	S1-2	S12			
	12:30 - 14:00	Lunch				
	14:00 - 16:00	S7	S8 + S9	Poster S3 & Exhibition	Poster S4 & Exhibition	
	16:00 - 16:15	Coffee Break				
	16:15 - 18:00	S1-3	S6-2			
	19:30 - 22:00	Conference Banquet				
Jun 14, Friday	09:00 - 11:00	S9	S11	Exhibition	Exhibition	
	11:00 - 11:15	Coffee Break				
	11:15 - 12:30	S5 + S10	S2-2			
	12:15 - 14:00	Lunch				
	Venue	Z207				
	14:00 - 15:30	Closing ceremony				
	15:30 - 17:30	Group meeting (IEEE WGs, CIGRE WGs, and so on)				

Conference Venues Layout

2nd Floor, Block Z, The Hong Kong Polytechnic University



Oral Sessions

*Candidate for Best Paper Award

#Candidate for Young Scientist Award

Session 1 - 1 Lightning Discharge (S1-1)
 Chairs Prof. Daohong Wang
 Prof. Kazuo Yamamoto
 Time 13:30 - 15:15 (Wednesday, Jun 12)
 Room Z207

PID Time	Title	Authors
152* 13:30-13:45	Characterization of preliminary breakdown pulses in negative ground flashes during winter thunderstorms in Bogota, Colombia	Granados, Camilo Alejandro; Rojas, Herbert Enrique; Román, Francisco José
238* 13:45-14:00	Charge-flow and field in soil due to return-stroke	Pal, Rupam; Kumar, Udaya
129 14:00-14:15	Cloud Electrification Model in COSMO Numerical Weather Prediction model	Minarova, Jana; Sokol, Zbynek
277 14:15-14:30	Development of A 1.5MV multi-Level High Voltage Generator based on the flyback DC-DC converter to Study the upward lightning leader in Laboratory	Zhang, Zhiyuan; He, Hengxin; Yu, Hui; He, Junjia; Bian, Kai; Chen, Weijiang
171* 14:30-14:45	Electric field waveform characteristics of natural cloud-to-ground lightning at different distances	Zou, Xin; Cai, Li; Wang, Jianguo; Li, Quanxin; Zhou, Mi; Fan, Yadong
220 14:45-15:00	Estimation on the Discharge Parameters of Lightning Initiation Processes Associated with Fast Positive Breakdown	Lyu, Fanchao; Qin, Zilong; Chen, Mingli; Cummer, Steven A.; Du, Ya-ping
258 15:00-15:15	Evidence for the connection between blue discharges and negative narrow bipolar events in deep convection	Liu, Feifan; Zhu, Baoyou; Wang, Wenwei; Peng, Changzhi; Wan, Zerun

Session 2 - 1 Lightning Detection and Warning Systems (S2-1)
 Chairs Dr. Wolfgang Schulz
 Prof. Jianguo Wang
 Time 13:30 - 15:30 (Wednesday, Jun 12)
 Room Z211

PID Time	Title	Authors
254* 13:30-13:45	A convolutional neural network for classification of lightning LF/VLF waveform	Peng, Changzhi; Liu, Feifan; Zhu, Baoyou; Wang, Wenwei
204* 13:45-14:00	An Inversion Method for Evaluating Thundercloud Charge Distribution Based on Doppler Radar and Electric Field Mill	Zhang, Zhuoyu; He, Zhenghao; Yang, Jin; Tu, Zhifei
130* 14:00-14:15	Cloud-Based Monitoring for SPDs using Advanced Measuring Methods for Lightning Disturbance	Joeres, Stefan; Claudi, Albert; Wetter, Martin; Finis, Gernot; Sander, Christian
134* 14:15-14:30	Cloud-to-Ground Lightning Activity in Guangdong Province, South China During the Period 2004-2017	Wang, Yu; Gu, Shanqiang; Feng, Wanxing; Tao, Hantao; Chen, Yang; Xu, Yuangen
137 14:30-14:45	Lightning Proximity Warning System for Power Transmission Channel with Integrated Multi-sensor	GU, Shanqiang; Wang, Jian; Peng, Bo; Wu, Dawei; Guo, Juntian; Bai, Bingjie
113 14:45-15:00	Performance validation of a ground strike point algorithm	Poelman, Dieter; P édebooy, St éphane; Schulz, Wolfgang
209 15:00-15:15	Observations of a dual band 3D lightning locating system	Dong, Wansheng; Liu, Hengyi; Wang, Tao
200* 15:15-15:30	A 4-year Timeliness Analysis of the Lightning Warning in Shenzhen China	Cai, Ran; Qiu, Zongxu; Luo, Xin; Yang, Yuexin; Su, Linzhi; Guo, Hongbo

Session 3 Lightning Electromagnetic Pulse (LEMP) and Lightning-Induced Effects (S3)
 Chairs Prof. Fernando Silveira
 Prof. Yoshihiro Baba
 Time 15:45 - 17:45 (Wednesday, Jun 12)
 Room Z207

PID Time	Title	Authors
218 15:45-16:00	Investigation of an Accelerator Driving Three Microwave Tubes Simultaneously	Ren, He-ming; Yang, Jian-hua
118 [#] 16:00-16:15	LLS Detection for Negative First and Subsequent Return Strokes Measured at Peissenberg Tower Germany	Paul, Christian; Heidler, Fridolin H.; Schulz, Wolfgang
230 [#] 16:15-16:30	Magnetic Field Properties of Upward Positive Stepped Leaders Initiated from a Tall Tower	GAO, Yan; CHEN, Mingli; QIN, Zilong; QIU, Zongxu; ZHANG, Ge; WANG, Shaoyang; DU, Yaping
212 [#] 16:30-16:45	Measurements and Analysis of Terrestrial Gamma-Ray Flashes (TGFs) within China	Zhang, Hongbo; Lu, Gaopeng; Lyu, Fanchao; Li, Xiao; Qie, Xiushu; Liu, Ruiting
131 [#] 16:45-17:00	Observations of the magnetic pulses during the initial stage of rocket-triggered lightning	Fan, Yanfeng; Lu, Gaopeng; Li, Xiao; Zhang, Yang; Lyu, Weitao; Zheng, Dong
173 17:00-17:15	Study on Effects of Lightning Strike on Secondary Cables in Substations	Liu, Zhuran; Shen, Wei; Zhang, Bo
133 17:15-17:30	Waveform Analysis of Lightning Induced Overvoltages on 10 kV Distribution Lines	shoupeng, Wang; jianguo, Wang; li, Cai; yadong, Fan; zheng, Kong; dai, Lu
177 17:30-17:45	Study on Waveform Characteristics and Field Enhancement Effect of Lightning Return Stroke Initiated from Wind Turbine	Chen, Huaifei; Wang, Yu; Sun, Tong; Zhang, Shi; Xiang, Nianwen; He, Tianyu

Session 4 Lighting Attachments (S4)
 Chairs Prof. V. Rakov
 Prof. Silverio Visacro
 Time 15:45 - 17:30 (Wednesday, Jun 12)
 Room Z211

PID Time	Title	Authors
119 [#] 15:45-16:00	A Quantitative Evaluation Method for Failure Risk of the Lightning Attachment System on Wind	Yu, Wanshui; Guo, Zixin; Zhang, Minhao; Li, Hongbo; Li, Qingmin; Liu, Liang; Siew, Wah Hoon
250 [#] 16:00-16:15	Characteristics of Lightning Attachment Point Distributions on Wind Turbine Blades under Downward Lightning	Gu, Jianwei; Chen, Weijiang; Huang, Shengxin; He, Tianyu; Shi, Weidong; Bian, Kai
210 [#] 16:15-16:30	Experimental research on the Effect of Ultraviolet Radiation on 1.5 m air gap discharges	Wang, Xiankang; Zhao, Xiangen; He, Junjia
214 [#] 16:30-16:45	High-speed Video Observations of a Close Lightning Attachment Process	QI, QI; LYU, WEITAO; WU, BIN; MA, YING; CHEN, LYUWEN
274 16:45-17:00	Influence of Corona Space Charge on the Lightning Attachment to UHVDC Transmission Lines	Xia, Dezhi; He, Hengxin; Chen, Shanshan; Xiao, Mian; He, Junjia; Chen, Weijiang; Bian, Kai
148 [#] 17:00-17:15	Optical signal characteristics of a rocket-triggered lightning at the height of 37.21 m	Su, Rui; Wang, Jianguo; Cai, Li; Fan, Yandong; Zhou, Mi; Du, Zhentao
207 17:15-17:30	Polarity of Upward Lightning based on Currents Measured at the Gaisberg Tower	Watanabe, Naomi; Nag, Amitabh; Diendorfer, Gerhard; Pichler, Hannes; Schulz, Wolfgang; Rakov, Vladimir; Rassoul, Hamid

Session 5 Lightning Down-Conductors and Earthing (S5)

Chairs

Prof. Marcos Rubinstein

Prof. Shozo Sekioka

Time

09:00 - 10:45 (Thursday, Jun 13)

Room

Z207

PID Time	Title	Authors
108 09:00-09:15	A Method to Model Soil Structure Based on the Randomness and Fractality of Soil Pore	Cao, Xiaobin; Li, Zhongmei; Li, Ruifang
211 [#] 09:15-09:30	Analysis of Lightning-generated Transients in Modern Buildings with a Large Metal Structure	Qi, Ruihan; DU, Patrick Y.; Chen, Mingli
226 09:30-09:45	Application of Genetic Algorithm to Detect Disconnected Locations of Down Conductors along Wind Turbine Blades	Triruttanapiruk, Nawakun; Yamamoto, Kazuo
227 [#] 09:45-10:00	Modeling of Transmission Tower Considering the Surge Response of Tower Grounding Device	Wusiman ZAIMURAN, Bo ZHANG, Sen WANG, Zhizhong LI, Zhaohua ZHANG, Wenbing XIE
139 [#] 10:00-10:15	Influence of Corona Discharge on the Propagation Speed of Lightning Surge Along a Tall Tower	Okada, Takuro; Baba, Yoshihiro; Tran, Thang H.; Rakov, Vladimir A.
260 10:15-10:30	Lightning response of grounding electrodes: simulations and measurements using artificial open-ended transmission lines	VISACRO, SILVERIO; OLIVEIRA, CAIO H. D.; MATTIOLI, PEDRO; SILVEIRA, FERNANDO HENRIQUE
193 10:30-10:45	Study on Earth Electrode Matching of Reinforced Concrete Foundation by Simulation Analysis	OHSHIMA, Masatoshi; KAWAI, Masayuki; YASUI, Shinji

Session 6 - 1 Lightning Protection of Power Systems (S6-1)

Chairs

Prof. Zhengcai Fu

Prof. Liuchun Zhang

Time

09:00 - 11:00 (Thursday, Jun 13)

Room

Z211

PID Time	Title	Authors
110 [#] 09:00-09:15	High voltage gradient zinc oxide varistors for line surge arresters and GIS tank-type arresters	Meng, Pengfei; Zhao, Xiaolei; Yang, Xiao; Wan, Shuai; Xu, Heng; Hu, Jun; He, Jinliang
167 09:15-09:30	A Study on Influence of a Surge Arrester on Multiphase Flashover in Medium-voltage Line	Sekioka, Shozo
183 [#] 09:30-09:45	Evaluation of Absorption Energy of Surge Arrester on Medium-Voltage Lines by Lightning to Wind Turbine in Winter	Asano, Masahiro; Michishita, Koji; Yokoyama, Shigeru
185 ^{#*} 09:45-10:00	Calculation of Lightning Wire Breaking Rate of Medium-Voltage Distribution Line	Ishimoto, Kazuyuki; Sato, Tomoyuki; Nagashima, Tomohiro
157 [#] 10:00-10:15	Review of Lightning Observation on Overhead Distribution Lines in japan	Yokoyama, Shigeru; Michishita, Koji; Sato, Tomoyuki; Sugimoto, Hitoshi; Moro-oka, Yasunari
284 10:15-10:30	Investigation of altitude dependence of multi-chamber arrester quenching efficiency.	Chusov, Alexander
239 10:30-10:45	Lightning Impulse Strength of 275 kV and 132 kV Tower with Composite Crossarm	Abd Rahman, Muhammad Syahmi; Ab Kadir, Mohamad Zainal Abidin; Ab Rahman, Muhammad Safwan; Osman, Miszaina; Mohd Nor, Samsul Fahmi
249 10:45-11:00	Calculation Research on the Distance Between the Grounding wire and Conducting wire of the Middle Span for ± 800 kV Transmission Lines	Zhang, Liuchun

Special Session Lightning and other Transients in Substations (SS)

Chairs Prof. Bo Zhang

Prof. Xiujuan Chen

Time 09:00 - 10:45 (Thursday, Jun 13)

Room Z206

PID Time	Title	Authors
178 09:00-09:15	Analysis of Red Sprites in the Middle and High Latitudes of China	Wang, Yongping; Lu, Gaopeng; Ma, Ming; Zhu, Baoyou
116 09:15-09:30	Experimental Study on Grounding Mode of Secondary Cable Shielding Layer of UHV Converter Station	Zhang, Zhaohua; Shi, Weidong; Kang, Peng; Zhang, Bo; Liu, Zhuoran; Shi, Lei
141 09:30-09:45	Influence of Grounding Design around Down Lead on Lightning Impulse Behavior of Substation Grounding Grid	Meng, Yongchang; Liu, Chuntao; Huang, Xuemin; Chen, Weiqing; Luo, Xin; Tan, Huan
275 09:45-10:00	Modeling of Cables for Lightning Analysis	Guner, Melih; Alboyaci, Bora
244 10:00-10:15	Study on ac breakdown characteristics of rod - plate gap in sand - dust environment	Wang, Jian; Tu, Zhifei; Yin, Ming; He, Zhenghao; Deng, Heming
273 10:15-10:30	Study on Direct Lightning Protection of ± 1100 kV Converter Station Grid	XIA, Chao; CHEN, Xiujuan; SHI, Weidong; LU, Tiantian; LEI, Ting; ZHAO, Xia
248 10:30-10:45	Lightning Protection of 110 kV and 220 kV Transformer Neutral Points in Shenzhen Power Grid	CHEN, Xiujuan; XIA, Chao; WU, Guoxing; ZHANG, Fan; WANG, Jianmin; SHI, Weidong

Session 1 - 2 Lightning Discharge (S1-2)

Chairs Prof. Udaya Kumar

Prof. Yijun Zhang

Time 11:15 - 12:30 (Thursday, Jun 13)

Room Z207

PID Time	Title	Authors
189 [#] 11:15-11:30	Initial Stage of Lightning Discharges Initiated by NBE and IBP	Zhang, Yang; Zhang, Xiao; Zhang, Yijun; Zheng, Dong; Lyu, WeiTao
253 [#] 11:30-11:45	Laboratory Generated Symmetrical-Waveshape Lightning Current versus Arc Channel Luminosity	Zhou, Mi; Lu, Yongyin; Wang, Jianguo; Cai, Li; Fan, Yadong; Fan, Yabei
201 [#] 11:45-12:00	Lightning Statistics Observed on Wind Turbines in Lightning-Susceptible Areas during Winter	Matsumoto, Takuma; Kai, Tsubasa; Iduchi, Shota; Yamamoto, Kazuo; Yokoyama, Shigeru; Sumi, Shinichi; Kondo, Shigetoshi; Suzuki, Kazuo
111 [#] 12:00-12:15	Observation on upward lightning induced by nearby positive cloud-to-ground lightning based on high-speed camera and radio frequency mapping system	Srivastava, Abhay; Yuan, Shanfeng; Qie, Xiushu; Jiang, Rubin; Wang, Dongfang
270 12:15-12:30	On the Onset Condition of Streamer Discharges under DC Superposed Impulse Voltage: a preliminary study	Xiao, Mian; He, Hengxin; He, Junjia; Che, Junru; Xia, Dezhi

Session 12 Lightning Safety (S12)
 Chairs Dr. Fanchao Iyu
 Prof. Daohong Wang
 Time 11:15 - 12:15 (Thursday, Jun 13)
 Room Z211

PID Time	Title	Authors
289 11:15-11:30	On the comparison of lightning fatality rates between states in Malaysia from 2008-2019	Syakura, A.R; Ab Kadir, Mohd Zainal Abidin; Gomes, C.; Izadi, M.; Elistina, A. B; Jasni, J.; Osman, M.
166 11:30-11:45	Overview of Lightning Injuries Around the World	Holle, Ronald
268 11:45-12:00	Study on Risk Assessment Method of Lightning Disaster about Petroleum in Chongqing	SHUYU, YU
153 12:00-12:15	Survey on actual lightning damage and condition of lightning protection for buildings	HIKICHI, JUN; Yokoyama, Shigeru; Hayashi, Kazuhiro; Shimada, Akira; Shimokawa, Hideo; Morishita, Daisuke

Session 7 Lightning Protection of Railways (S7)
 Chairs Dr. Hitoshi Hayashiya
 Prof. Xiaobin Cao
 Time 14:00 - 16:00 (Thursday, Jun 13)
 Room Z207

PID Time	Title	Authors
151 14:00-14:15	Behavior of varistor voltage change due to impulse current and DC voltage for MOVs in railway application	Tsukazaki, Minoru; Tsukamoto, Naoyuki
291 14:15-14:30	Designing Lightning Protection, Earthing and Bonding System for Railways	Sam Ng
261 14:30-14:45	Field Test of Lightning Performance at DC Traction Substation	Tanaka, Hiroki; Takeuchi, Shin; Itou, Kazuhiko; Miyaguchi, Hirokazu; Nagaoka, Naoto
158 14:45-15:00	Influence of railroad track elevation on insulation performance of railway power supply system against lightning	Hayashiya, Hitoshi; Amari, Satoshi
181 [#] 15:00-15:15	Measurements and calculations of rail potential in D.C. traction power supply system	Ooagu, Ryosuke; Yashiro, Yukio; Naito, Hiroki; Taguchi, Kiichi; Amari, Satoru; Hayashiya, Hitoshi
205 [#] 15:15-15:30	Overvoltage Response at Railway Insulators Based on Viaduct Configuration	Ohashi, Toshiki; Asai, Yuki; Kusagawa, Kentaro; Yamamoto, Kazuo; Sumi, Shinichi
252 15:30-15:45	Safety Performance Evaluation of High Speed Railway Traction Substation Grounding Grid	Cheng, Lingyun; Xiang, Nianwen; Xu, Zongqi; Wang, Litian; Wan, Yihu; Li, Wei
198 15:45-16:00	Understanding the Flashover Characteristics across Stay Arm Insulator due to Lightning Stroke	Thangabalan, B; Das, Supriyo

Session 8 & 9 Lightning Protection of Electronic Systems (S8) & Lightning Protection of Renewable Energy Systems and Smart Grids (S9)

Chairs Prof. Shinji Yasui

 Prof. A. Piantini

Time 14:00 - 15:45 (Thursday, Jun 13)

Room Z211

PID Time	Title	Authors
175 14:00-14:15	Advanced Circuit Interruption Technology (ACI) – an innovative design concept for SPDs	Brocke, Ralph; Schoepf, Thomas J.
159 [#] 14:15-14:30	Finite-Difference Time-Domain Analysis of a Lightning-Impulse-Applied ZnO Element	Tsuge, Ryosuke; Baba, Yoshihiro; Kawamura, Hironao; Hamoto, Naoki
138 14:30-14:45	Research and Protection of Overvoltage Caused by Lightning Stroke on Wind Farm Collector Lines	Zhou, Qibin; Yang, Hongxiang; Wang, Zhenxing; Yao, Ximei
140 14:45-15:00	Smart IoT Monitoring System for Surge Protective Devices (SPDs)	Wetter, Martin; Sander, Christian; Finis, Gernot; Joerres, Stefan
246 [#] 15:00-15:15	Surge Isolation Components (Surge Mitigation Components)	Nishida, Kenji; Yamada, Yasuharu
213 15:15-15:30	The Influence of Bonding Conditions on Lightning Current Distribution in Radio Base Stations	Zhang, Yang; Chen, Hongcai; DU, Patrick Y.
114 15:30-15:45	Investigation Report on Lightning Damage on Inuyama Castle and Related Lightning Impulse Test of Roof Tile	yanagawa, shunichi; shimada, akira; hayashi, kazuhiko; yokoyama, shigeru

Session 1 - 3 Lightning Discharge (S1-3)

Chairs Prof. Xiushu Qie

 Dr Amitabh Nag

Time 16:15 - 18:00 (Thursday, Jun 13)

Room Z207

PID Time	Title	Authors
197 [#] 16:15-16:30	Measurement results of lightning current at Nikaho in winter from 2013 to 2017	Hayashi, Shohei; Michishita, Koji; Yokoyama, Shigeru; Honjo, Nobuyuki
165 [#] 16:30-16:45	Optical Observations on Propagation Characteristics of Dart Leader in Natural Lightning Striking on Canton Tower	Wang, Xiaolei; Cai, Hansheng; Liu, Gang; Liao, Minchuan; Qu, Lu; Zhao, Xiangen
161 [#] 16:45-17:00	Progression Characteristics of Dart Leaders Observed by LAPOS5	Huang, Haitao; Wang, Daohong; Wu, Ting; Takagi, Nobuyuki
160 [#] 17:00-17:15	Recoil leaders observed in a Canton-Tower upward flash	Lyu, Weitao; Wu, Bin; Qi, Qi; Ma, Ying; Chen, Lyuwen; Jiang, Ruijiao
168 17:15-17:30	Some Abnormal Lightning Flashes Imaged by the FALMA	Wu, Ting; Wang, Daohong; Takagi, Nobuyuki
146 [#] 17:30-17:45	Time and Space Scales and Optical Radiance of Flashes over the Asia-Pacific Region	Zheng, Dong; You, Jin; Zhang, Yijun; Yao, Wen; Meng, Qing
176 [#] 17:45-18:00	Two Possible Scenarios for the Formation of Category 1 Bipolar Lightning Flashes	Azadifar, Mohammad; Li, Quanxin; Rubinstein, Marcos; Ravhidi, Farhad; Rakov, Vladimir; Pavanello, Davide

Session 6 - 2 Lightning Protection of Power Systems (S6-2)
 Chairs Prof. Jianguo Wang
 Prof. Anantawat Kunakorn
 Time 16:15 - 18:00 (Thursday, Jun 13)
 Room Z211

PID Time	Title	Authors
184 [#] 16:15-16:30	Analysis of Surge Arrester Damage Accident on Distribution Line due to Winter Lightning	Matsuda, Yuki; Yokoyama, Shigeru; Michishita, Koji; Sato, Tomoyuki
126 16:30-16:45	Multi-Chamber Disc-Type Lightning Arrester for 13,8 kV Overhead Lines Protection	Enkin, Evgenii; Podporkin, Georgy; Belko, Dmitriy; Pilschikov, Vladimir
216 16:45-17:00	Research on Insulation Level and Lightning Protections of 10 kV Overhead Insulated Distribution Lines	Xiong, Zehao; Zhou, Wenjun; Yu, Jianhui; Li, Han; Yuan, Guoliang; Li, Xin
117 [#] 17:00-17:15	Study on Short-Circuit Current Performance of ± 500 kV DC Transmission Line Surge Arrester	Gu, Shanqiang; Wang, Yatong; Cao, Wei; Wan, Shuai; Chen, Xiumin; Wang, Jian
206 [#] 17:15-17:30	Study on the Mechanical Performance of Anti-thunder Composite Insulator for Distribution Line	Lu, Jiazheng; Wang, Bowen; Fang, Zhen
155 ^{#*} 17:30-17:45	Test and Observation of Lightning Shielding Characteristics of ± 1100 kV Transmission Lines	Deng, Yejiang; Wang, Yu; Wen, Xishan; Zhang, Tao
281 17:45-18:00	The Power Loss Calculation Model of Metal Oxide Resistors at Continuous Operating Voltage	He, Ziming; Chen, Xiujian; Chen, Weijiang

Session 9 Lightning Protection of Renewable Energy Systems and Smart Grids (S9)
 Chairs Dr Baoyou Zhu
 Prof. WH Siew
 Time 09:00 - 11:00 (Friday, Jun 14)
 Room Z207

PID Time	Title	Authors
125 09:00-09:15	Development of High-Frequency Damped-Oscillation Current Generator to Evaluate Lightning Detection Devices for Wind Turbines	Yamamoto, Kazuo; Masuda, Kotaro; Sumi, Shinichi
199 09:15-09:30	Effect of group grounding on the potential rise across solar PV panels during lightning strike	Siew, WH; Mohamed, FP; Mahmud, S
286 09:30-09:45	Experimental investigation of the damage of GFRP under 10/350 μ s simulated lightning currents	Zhao, Yang; Yang, Chunhao; Fu, Zhengcai
251 09:45-10:00	Experimental Study on SPDs for Smart Facility Equipment	Tonoshiro, Takanori; Yanagawa, Shunichi
278 [#] 10:00-10:15	Research on the Performance of the Lightning Protection System with Overlying Conductors on the Tip of the Wind Turbine Blades	He, Tianyu; Chen, Weijiang; Shi, Weidong; Bian, Kai; Huang, Shengxin; Pei, Zhehao
287 10:15-10:30	Test of A Lightning Current Sensor for Wind Turbine Tower Drum Current Measurement	Xu, Zhen; Johansen, Peter; Fu, Zhengcai
104 [#] 10:30-10:45	The Influence of the Metal Mesh to the Attachment Manner of CFRP Wind Turbine Blades	Guo, Zixin; Yu, Wanshui; Fang, Zhiyang; Zhang, Minhao; Li, Hongbo; Li, Qingmin; Siew, Wah Hoon
266 [#] 10:45-11:00	A Study on the Cable Grounding Condition in Wind Turbines Under Direct Lightning	Chen, Hongcai; Zhang, Yang; Du, Yaping

Session 11 Practical and Specific Lightning Protection Problems (S11)
 Chairs Dr. Helio Eiji Sueta
 Prof. F. Heidler
 Time 09:00 - 10:45 (Friday, Jun 14)
 Room Z211

PID Time	Title	Authors
123 09:00-09:15	Analytical Method for Performance Degradation of Voltage Limiting Type SPD Based on Leakage Current Measurement	Li, Guiting; Gong, Ling; Lei, Chenyong; Yang, Guohua
169 09:15-09:30	Failure Modes and Energy Handling Capability of ZnO Varistors with Different Electrode Edge Margins Stressed by Current Impulses	Fu, Zhiyao; He, Junjia; Lu, Jiazheng; Fang, Zhen; Wang, Bowen
147 09:30-09:45	Lightning transient on neighborhoods of communication towers: a simulation case study.	Mahadura, Udara Mendis; Jayaratne, Chandana
215 09:45-10:00	Research on Cable Crane Lightning Protection for Hydroelectric Power Station Construction	Zhou, Wenjun; Huang, Kejian; Li, Han; Yao, Ximei; Yu, Jianhui; Xiong, Zehao
115 10:00-10:15	Study on Difference of Ground Flash Density in Mountainous Areas and Presentation of mesoscopic terrain	Li, Ruifang; Tao, Xin; Cao, Xiaobin; Du, Hao
182 10:15-10:30	The Simulation Model and Analysis of Transient Ground Potential Rise of GIS Equipment in Lightning Impact Test	Zhang, Tong; Yuan, Tao; Li, Xiaochuan; Sima, Wenxia; Yang, Ming; Sun, Potao
170 [#] 10:30-10:45	Lightning fault analysis of 10 kV hybrid distribution lines	Chi, Wu; Luyao, Zheng; Youxu, Wang; Bo, Sun

Session 5 & 10 Lightning Down-Conductors and Earthing (S5) & Lightning Testing Standards or Guidelines of Lightning Protection (S10)
 Chairs Prof. Peerawut Yuthagowith
 Dr. Qibin Zhou
 Time 11:15 - 12:15 (Friday, Jun 14)
 Room Z207

PID Time	Title	Authors
290 11:15-11:30	Experimental Study on Impact Grounding Characteristics of Transmission Line Tower	Li, Wei; Wang, Sen; Li, Zhizhong; Sheng, Bingyan
217 [#] 11:30-11:45	Application of A Neural Network Algorithm for Evaluation of Lightning Impulse Voltage Parameters	Kitwattana, Krit; Yuthagowith, Peerawut
221 11:45-12:00	Influence of Grounding Modes on the Damage of Carbon Fiber Reinforced Plastics subjected to Lightning Strikes	Chen, Jian; Fu, Zhengcai
222 [#] 12:00-12:15	Influence of double-component epoxy resin coating on the ablation characteristic of coated steel under simulated lightning continuing current	Dai, Mingqi; Liu, Yakun; Fu, Zhengcai

Session 2 - 2 Lightning Detection and Warning Systems (S2-2)

Chairs Prof. Weitao Lyu

Prof. Yijun Zhang

Time 11:15 - 12:30 (Friday, Jun 14)

Room Z211

PID Time	Title	Authors
263 [#] 11:15-11:30	Potential of GPU-Based Grid Traverse Algorithm for Lightning Geolocation	Qin, Zilong; Chen, Mingli; Lyu, Fanchao; Cummer, Steven A.; Zhu, Baoyou; Liu, Feifan; Du, Yaping
162 11:30-11:45	Practical Features of 3D Lightning Mapping System FALMA	Wang, Daohong; Wu, Ting; Takagi, Nobuyuki
202 [#] 11:45-12:00	Small-Diameter Rogowski Coil and Integrator for Wide-Band Current Sensor	Watanabe, Hiroyasu; Nomura, Issei; Wada, Takanori; Yamamoto, Kazuo; Sumi, Shinichi
257 12:00-12:15	Three-dimensional lightning observation using two interferometers	Sun, Zhuling; Qie, Xiushu; Wang, Caixia; Liu, Mingyuan; Jiang, Rubin
156 12:15-12:30	Observation and Analysis Results of an Electrical Field Sounding System	Yu, Hai; Zhang, Tinglong; Gao, Yi; Zhou, Fangcong; Lao, Xiaoqing

Poster Sessions

Poster Session 1 (Poster S1)

Chairs Prof. Zhenghao He
 Dr. S. Gu
 Time 09:00 - 12:30 (Thursday, Jun 13)
 Room Z210

PID	Title	Authors
154 [#]	A Study on the Initiation of Initial Breakdown	Shi, Dong; Wang, Daohong; Wu, Ting; Takagi, Nobuyuki; Huang, Haitao
271 [#]	An Experimental Study on the Positive Streamer Leader Propagation under Switching Impulse Voltages in a 10m Rod-Plane Air Gap	Shah, Wahab Ali; He, Junjia; Ahmad, Tanveer
163 [#]	Characteristics of Acoustic Response from Impulsive Lightning Current Discharge	Cao, Jinxin; Wang, Jianguo; Cai, Li; Zhou, Mi; Fan, Yadong; Li, Quanxin
188 [#]	Development of an upward lightning and its channel branching	Yuan, Shanfeng; Jiang, Rubin; Qie, Xiushu; Sun, Zhuling; Wang, Dongfang; Srivastava, Abhay
149 [#]	First comparison of measurements of Ka-band cloud radar with lightning in Central Europe	Minarova, Jana; Sokol, Zbynek; Pesice, Petr
272 [#]	Intensive Chaotic Pulse Trains in Subsequent Leaders of Rocket-Triggered Lightning	Jiang, Rubin; Qie, Xiushu; Pu, Yunjiao; Sun, Zhuling; Liu, Mingyuan; Zhang, Hongbo; Li, Xiao; Ma, Zilong; Li, Zongxiang; Tang, Guoying; Dong, Zhicheng
233	Lightning Characteristics of Tropical Storm Bebinca (2013) and Super Typhoon Rammasun (2014)	Zhou, Fangcong; Zhou, Guohai; Gao, Yi; Pan, Jiali; Lao, Xiaoqing; Yu, Hai
124 [#]	LiOn Return Stroke Peak Current Analysis for Ground Strike Points in the Austrian Alps	Schwalt, Lukas; Pack, Stephan; Schulz, Wolfgang
150	Positive Recoil Leaders in Tower-initiated and Rocket-triggered Lightning Flashes	Qie, Xiushu; Jiang, Rubin; Zhang, Hongbo; Wang, Dongwang; Liu, Mingyuan; Sun, Zhuling; Yuan, Shanfeng; Srivastava, Abhay; Lu, Gaopeng
145	Reflectivity Characteristics at the First Detected VHF Radiation Source of Stratiform Lightning Flash Associated with the Charge Layer of Melting Level	Wang, Fei; Liu, Hengyi; Dong, Wansheng; Zhang, Yijun; Meng, Qing
235	The Detailed Time-frequency Analysis of The HF/VHF Emissions Accompanied with CG Lightning Flashes	Chen, Yang; Zhang, Bo; Wang, Yu; Wang, Zhao; Xu, Yuangen
179 [#]	Study on Flammability of Lightning Fire in Ancient Buildings in Shanghai	Tang, Hongke
229	Influence of lightning on meteorological parameters over land-ocean of Indian region	Tinmaker, Mohommad Iqbal; Mushtaq, Fayma
247	Cloud-to-ground lightning observation over Yunnan Province	Xie, Yiran; Wu, Jian; LIU, Xuetao; SUN, Jihua; XU, Yinjie
187	Influence of grounding wire configuration of traction substation	Owaku, Tomohiro

Poster Session 2 (Poster S2)

Chairs Prof. Zhenghao He
 Dr. S. Gu
 Time 09:00 - 12:30 (Thursday, Jun 13)
 Room Z208

PID	Title	Authors
194#	Comparison and Analysis of Lightning Characteristics Based on Data Obtained by Fengyun-4A Satellite and ADTD Three-Dimensional Lightning Monitoring Network in Jiangsu Province	Yan, Liu; Zheng, Li; Hongbing, Wang
262#	Earth Networks Lightning Network and Dangerous Thunderstorm Alerts	Lapierre, Jeff; Stock, Michael; Cumbulam Thangaraj, Saiadithya; Hoekzema, Mark; Merrill, Chad
276	Inner-core lightning outbreaks and convective evolution in Super Typhoon Haiyan (2013)	Zhang, Wenjuan; Zhang, Yijun
142	Performance Assessment of FY-4A Lightning Mapping Imager	Cao, Dongjie; Lu, Feng; Zhang, Xiaohu; Zhang, Zhiqing
282	Comparison of lightning Optical observation data of Shenzhen tower on Lightning Location System of Guangdong-Hong Kong-Macau	Guo, Hongbo; Yang, Yuexin; Qiu, Zongxu; Su, Linzhi; Qin, Zilong; Cai, Ran
288	Research on Data Processing Method of Lightning Current Acquisition	Li, Shun; Yi, Xiucheng
109	Historical Transition of Location Accuracy of JLDN	Matsui, Michihiro; Michishita, Koji
191	Evaluation Of Lightning Current Parameters Using Measured Lightning Induced Voltage On Distribution Power Lines	Izadi, Mahdi; Ab Kadir, Mohd Zainal Abidin; Osman, Miszaina
256#	Statistical Lightning Study for 33kV Overhead Line in Peninsular Malaysia	Norhasliza Mohd Hatta, Noradlina Abdullah, Miszaina Osman, Mohd Zainal Abidin Ab Kadir
283	Application of insulation technology in tower lightning current measurement	Yang, Yuexin; Qiu, Zongxu; Guo, Hongbo; Qin, Zilong; Chen, Mingli; Cai, Ran
292	Application of A PEEC Method in Backflashover Simulation of HV Transmission Lines in Thailand	Peerawat Yutthagowith1, P. Sirachansawang2
186	Study on Distribution Characteristics of Leakage Current in DC Field of Converter Station	liu, nanjiang; yuan, tao; chen, wei; li, jialun; sima, wenxia; yang, ming
279	Investigations of Peculiarities of Stimulation of the Processes of Initiation of Downward and Intracloud Lightning Using Artificial Thunderstorm Cells	Temnikov, Alexander; Chernensky, Leonid; Orlov, Alexander; Lysov, Nikolay; Zhuravkova, Daria; Belova, Olga; Kivshar, Tatiana
280	Artificial Stimulation of Processes of Lightning Initiation in Thunderclouds	Temnikov, Alexander; Chernensky, Leonid; Orlov, Alexander; Lysov, Nikolay; Zhuravkova, Daria; Belova, Olga; Kivshar, Tatiana; Kalugina, Inna; Voevodin, Vadim
285	Self-calibrating transientvoltage measuring method based on integrated optical electric field sensor	Yu, Hao; Zhuang, Chijie; Xie, Shijun
242	The application of multi-gap arresters in 10~35kV overhead transmission line	liu, xu; Rong, Jianwei

Poster Session 3 (Poster S3)

Chairs Dr. Chijie Zhuang
 Dr. Sam Ng
 Time 14:00 - 17:30 (Thursday, Jun 13)
 Room Z210

PID	Title	Authors
120	Response Characteristics of Surge Protective Devices to An Artificially Triggered Lightning	Zhang, Yijun
128	Research on Lightning Activity at High Altitude in Tibet	Jicuomu, De; Zhuo, Gong; Mashida, Ni; Zejun, Lu; Jun, Wu; Jiawei, Wan
269 [#]	Comparative Analysis of ACSR and ACCC Conductors on Corona Effect for Lightning Surge Studies	Nawi, Zawati; Ab Kadir, M.Z.A.; Mohamed, I.; Azis, N.; Wan Ahmad, W.F; Ungku Amirulddin, U.A.; Nordin, F.H.
180 [#]	Analytical Study of Lightning Protection Performance by Excluding the Current-Limiting Arcing Horns of a Phase	Tanida, Masakazu; Nakagawa, Masaya; Yasui, Shinji; Uenishi, Hirokazu; Kunii, Yasuyuki; Kanazawa, Yuuki
196	Comparison and Analysis of Lightning Overvoltage by Grounding Methods between Wind Turbines	Pyo, Kuang-Jin; Kim, Kyu-Ho; Woo, Jung-Wook; Kim, Tae-Kyun
190 [#]	Calculating the Potential Difference Between the Ground Electrodes of a Building Struck Directly by Lightning	Ogiso, Masato; Komori, Shunya; Yasui, Shinji; Yamamoto, Tasuya; Kobayashi, Hiroshi
112	Study of correlation between installation method and absorbed energy of surge arresters and current-limiting arcing horns with zinc oxide elements	Arai, Nobutaka; Mizoguchi, Tomoyuki; Mori, Ryota; Ishimoto, Kazuyuki; Asakawa, Akira; Kunitomo, Takahiro; Yoshida, Yuichi
203	Numerical Simulation of Protection Effect of Lightning Shielded Wire of Buried Cable under Different Arrangements	Ding, Can; Tu, Tiancheng; Fang, Chunhua; Yuan, Fating; Li, Chengxi; Xu, Yilun
231	Research on Lightning Protection Assessment of The Distribution Line Considering The Influence of Trees	YAO, Yao; LI, Xiaoping; AI, Fuzhou; LU, Zejun; FU, Jingwei; WU, Jun
243 [#]	Implementation and Use of Multi Chamber Arresters for 33kV Overhead Lines in Malaysia	Abdullah, Noradlina; Mohd Hatta, Norhasliza; Osman, Miszaina; Abd Kadir, Mohd Zainal Abidin; Ariffin, Mohd Faris
264	Quantitative Schlieren Diagnostics for the Measurement of Gas Temperature during Streamer to Leader Transition in Positive Long Air Gap Discharges	Chen, Cheng; Hengxin, He
237	The Relevance of Current Front time Variation on the Assessment of Backflashover Probability of Transmission Lines	SILVEIRA, FERNANDO; VISACRO, SILVERIO
195	Analysis of Lightning Overvoltage According to Position of Lightning-Induced Voltage at the Solar Power Plant	Jae-Young Cho, Jin-Hyuk Kim, Taeck-Kie Lee, Kyu-Ho Kim, Jung-Wook Woo
267	Analysis of Lightning Protection Reform Measures for 10kV Distribution Network in Jinzhai Area	jia, chenglong; Gao, Yuan; Zhao, Winbin

Poster Session 4 (Poster S4)

Chairs Dr. Chijie Zhuang
 Dr. Sam Ng
 Time 14:00 - 17:30 (Thursday, Jun 13)
 Room Z208

PID	Title	Authors
105	Impulse Characteristics of Model Grounding Electrodes for a Transmission Tower-Footing Base Structure	Lee, Young-Jun; Choi, Jong-Kee; Kim, Hoe-Gu; Lee, Bok-Hee
224	The Application of Current-limiting Air Terminals on High-rise Buildings	liu, xu; Jiang, Keqiang
102	Design and Application of PCB on board SPD for Photovoltaic Inverter	Gao, XuanHui
219	Lightning Surge on the DC and AC side of Solar PV System	Zaini, Nur Hazirah; Ab. Kadir, Mohd Zainal Abidin; Mohd Radzi, Mohd Amran; Azis, Norhafiz; Ahmad, Nor Izzati; Mohd Nasir, Mohd Solehin; Izadi, Mahdi; Abd Aziz, NurFadilah Abd Aziz; Zaipatimah Ali
164	Development of SPD unit for HVDC system	Sato, Atsushi
255	Modeling of Offshore Wind Turbine Under Lighting Stroke and Analysis of Impact Factors on Transient Overvoltage	Lu, Heng; Xia, Nenghong; Qian, Chao
265	Optimal Configuration Scheme of Lightning-caused Breakage Prevention Measures for 10kV Distribution Network in Different Landforms	Zhao, Guowei; Bai, Jie; Li, Cheng; Wang, Qiang; Zhao, Rui
234 [#]	Electric Field Distribution on Surface of Metamaterial under Lightning Impulse	Su, Xiaowei; Zhou, Mi; Shan, Fei; Cai, Li; Wang, Jianguo; Fan, Yadong
245	Analysis of Characters of Lightning Activity and Lightning Disaster in Hunan	HE, Qiuyan; LIU, Fengjiao; LIU, Yueyu; WANG, Shaojuan; YANG, Jiayan; GUO, Bin
135	The risk and protection of lightning disaster in Potala Palace	Huaming, Zhang; Yaolong, Liu; Yijun, Zhang; Yong, Qian; qiang, Li; Junqing, Hu
122	Development of electric field mill and initial results of ground-based field mill network observation	Kudo, Takeshi; Kamogawa, Masashi
208	Quantitative analysis and economic loss forecast of lightning disaster in Hunan province	Wan, Xiecheng; Liu, Fengjiao; Wang, Yaoxi; Huang, Hao
241	The Application of Multi-source Monitoring in Lightning Warning for Fireworks Industry	Wang, Yaoxi; Zeng, Qingyun; Ma, Qiang; Nie, Xinyu
192	The Impact of Organizational Factors on Lightning Safety Performance	Hajikhani, Maryam; Izadi, Mahdi; Ab Kadir, Mohd Zainal Abidin