

EFFECTS OF TRUCK IMPACTS ON BRIDGE PIERS

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Date: 20 January 2017 (Friday)

Time: 18:30 - 19:30

Venue: Y305, The Hong Kong Polytechnic University

Abstract

According to Federal Highway Administration, impact by moving trucks is the third leading cause of bridge failure or collapse in the US. Although the current AASHTO LRFD Guide Specifications prescribe designing bridge piers by applying a 600 kips static load at a height of 4-ft to improve their impact resistance, recent studies have shown that the dynamic forces because of truck impacts may be significantly higher than that recommended by the AASHTO Guide Specifications. In this research, we present an extensive investigation on the impact of concrete bridge piers by trucks running at different speeds by modeling bridges and trucks in LS-DYNA simulation software package, in which both medium- and heavy-weight trucks have been simulated.

Biography

Prof. Anil Agrawal is currently a Professor of Civil Engineering at the City College of the City University of New York, New York. He joined the City College of the City University of New York, September 1998. He received his Ph.D. in Civil Engineering from the University of California, Irvine, in August 1997, M.Eng. from the University of Tokyo, Japan in 1991 and Bachelor degree in Civil Engineering from IIT Kanpur. Dr. Agrawal is a licensed professional engineer in New York since July 2001. He is currently the Chief Editor of the *ASCE Journal of Bridge Engineering*, past-chair of ASCE Committee on Bridge Inspection, Rehabilitation and Monitoring and the past chair of ASCE Committee on Structural Control and Sensing. He is also the president of US Panel of International Association of Structural Control and Monitoring. His areas of research include structural response control, seismic risk assessment of bridges, blast and vehicular impact loads on bridges, and safety of long span bridges.

Online registration at <http://goo.gl/HGKwPH> or by scanning the QR code.

This seminar is free of charge. The attendance certificate will be provided upon request.

For more information, please contact Dr. Songye Zhu: 3400 3964 or Email ceszhu@polyu.edu.hk



Campus Map

校園地圖

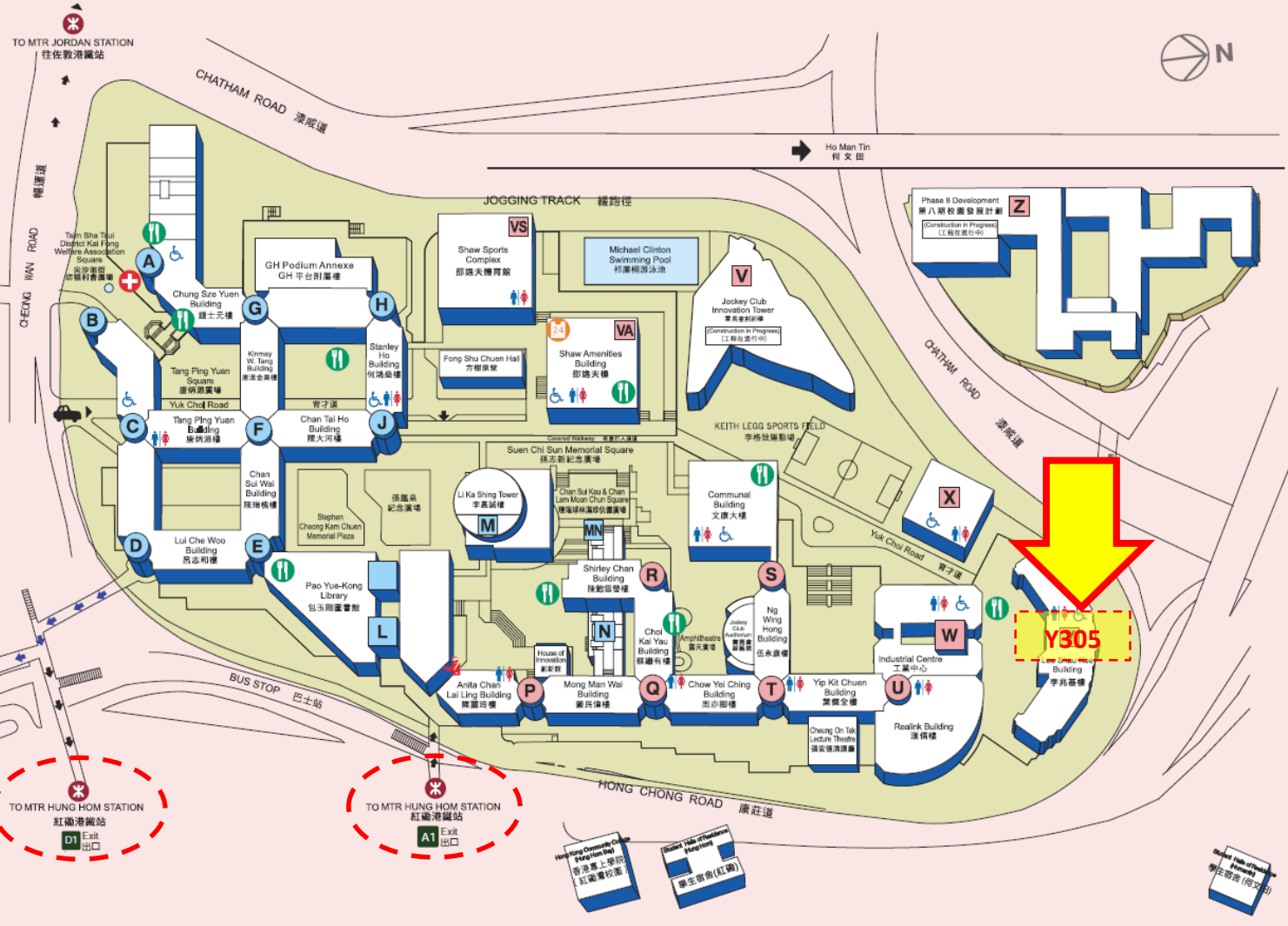
KEY TO CAMPUS MAP 校園索引

	Core		閣下在此 You are here
	Wing		洗手間 Toilet
	Block		傷殘人士洗手間 Toilet for Disabled
	大學醫療保健處 University Health Service		餐廳 / 酒樓 / 咖啡室 Canteen / Restaurant / Cafe
	保安控制室 Guard Post		便利店 Convenience Store

Location Map of Off-Campus Venues 校外場所位置圖



1. PolyU Main Campus 香港理工大學主校園
2. Student Halls of Residence (Hung Hom) 學生宿舍 (紅磡)
3. Student Halls of Residence (Homantin) 學生宿舍 (粉嶺)
4. Hong Kong Community College (Hung Hom Bay) 香港專上學院 (紅磡灣校園)
5. Hong Kong Community College (West Kowloon) 香港專上學院 (西九龍校園)
6. PolyU (Kowloon Tong Campus) 香港理工大學 (九龍塘校園)
7. Off Campus Housing (OCH - Shan Tung Street) 校外宿舍 (山東街)
8. Off Campus Housing (OCH - hillwood Road) 校外宿舍 (山景道)
9. Off Campus Housing (OCH - Yu Chau Street) 校外宿舍 (裕州街)



Online campus map : <http://www.polyu.edu.hk/fmo/eMap/CampusMap.pdf>