Introduction of SEU International Summer School Program

International Summer School of Frontiers inCivil Engineering Infrastructure

1

1.1 A

Frontiers in Research: Seminar Series on Civil Engineering – State of the Art

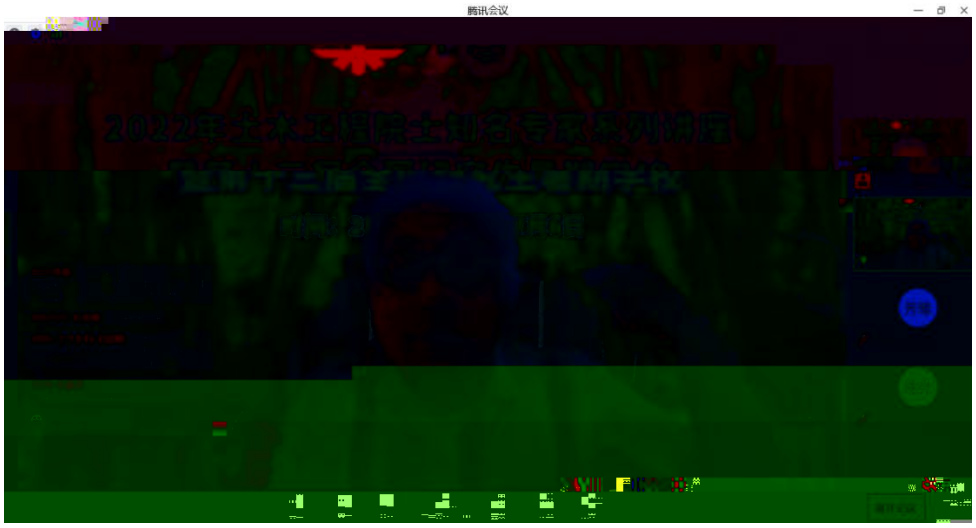
16

SRTP

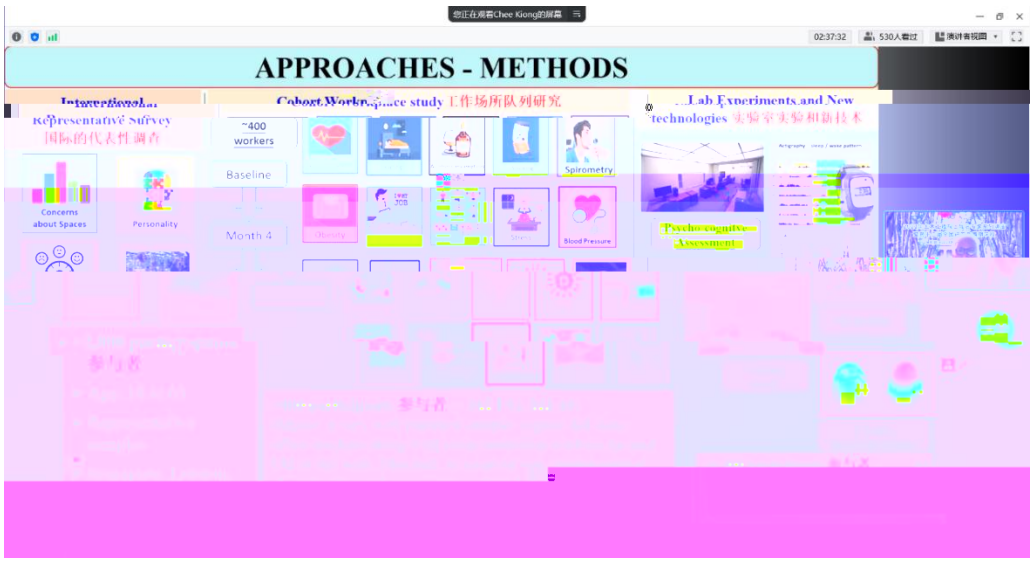
1.

Date	Time	Presenter	Topic	Tencent Meeting
7.2		M	o ct ct	
7.2			cto ct ct o	
7.2			ck ct o o o ct	

7.3		o	o	
7.5		l ck ct	o ct ck o o ct	
7.5			o ct ct ck o ct ck o	




Chee Kiong
Other aspects of human centric UG space designs
以人为本的其他方面地下空间设计
Bright colours
Continued connectivity
https://secure.i.telegraph.co.uk/multimedia/archive/01782/wikileaks-bunker-2_1782755i.jpg
Clear signs 明显标志
Several exit points 几个出口
Acoustic comfort 声响舒适性
Visibility and accessibility to AG
Interconnection of spaces 地上空间互联的可视性和可达性


您正在观看Chee Kiong的屏幕
02:37:32
530人看过
APPROACHES - METHODS
Representative Survey
国际的代表性 调查
~400 workers
Baseline
Month 4
Concerns about Spaces
Personality
Spirometry
Blood Pressure
Psycho-cognitive Assessment
...Lab Experiments and New Technologies 实验室实验和新技术


PURDUE UNIVERSITY
Asset Management:
A Strategy for Disaster Prevention
PURDUE UNIVERSITY
Construction Engineering and Management
Tom Iseley
兴儒
赵东
泓方

PotPlayer [MP4] [1/2] meeting_01.mp4

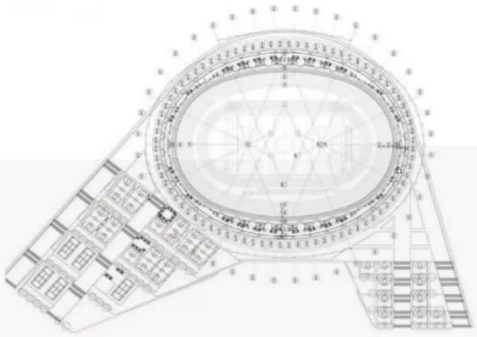
结构与防灾二组-谢文博

Introduction

Suzhou Olympic Sports Center

The total construction area is 88,770m². The east-west length of the main grandstand is about 240m.

After calculation, the vertical self-oscillation frequency of the first few steps here is in the range of 3Hz-4.5Hz. And the frequency of excitation generated by people walking is 1.5Hz-3.2Hz, so when the intensive activities of people occur in the stands, it is easy to cause structural resonance.



Research Pluralism-Metrics

- Biogas
- Biohydrogen
- Microalgae
- Photobioreactors
- Biochemicals
- Biodiesel
- Xenobiotics
- Fermentation
- Membranes
- Down streaming

Ioannis Fotidis的屏幕共享

Ionian University 4

腾讯会议

录制中

能源與環境學院 School of Energy and Environment

CityU 香港城市大學 City University of Hong Kong

SKLMP 海洋污染國家重點實驗室

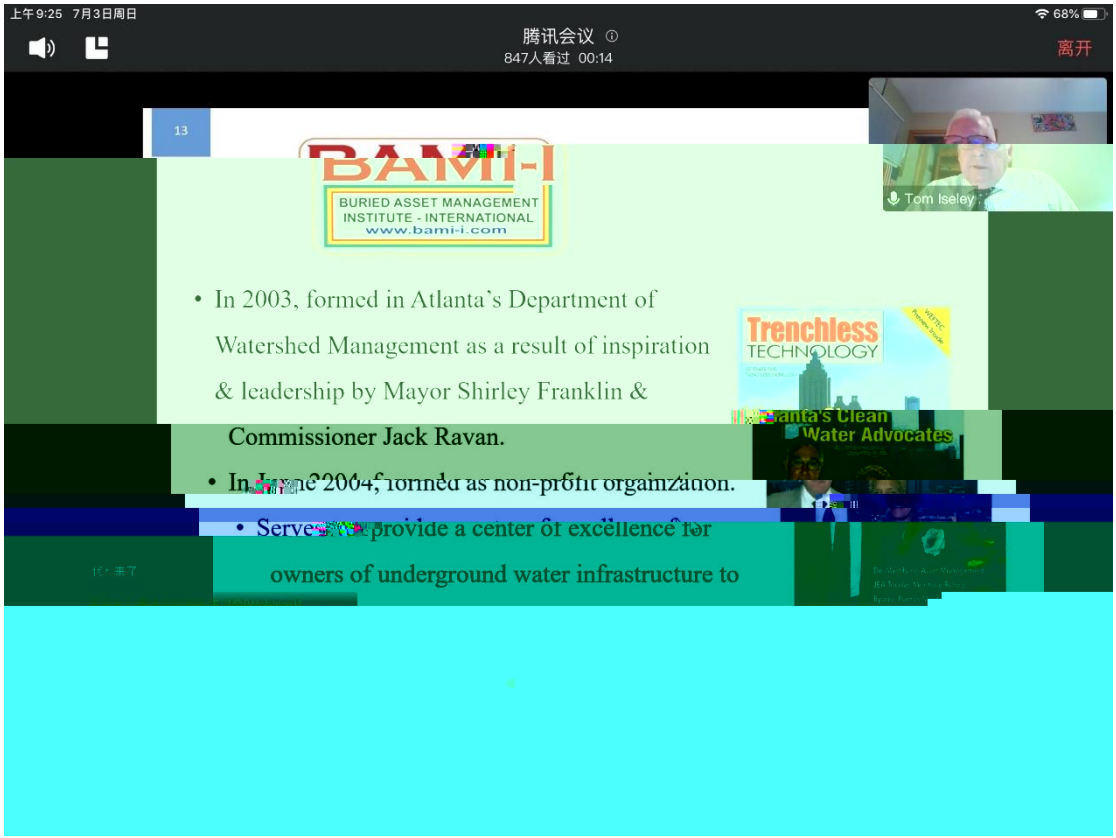
Liquid Crystal Monomers:

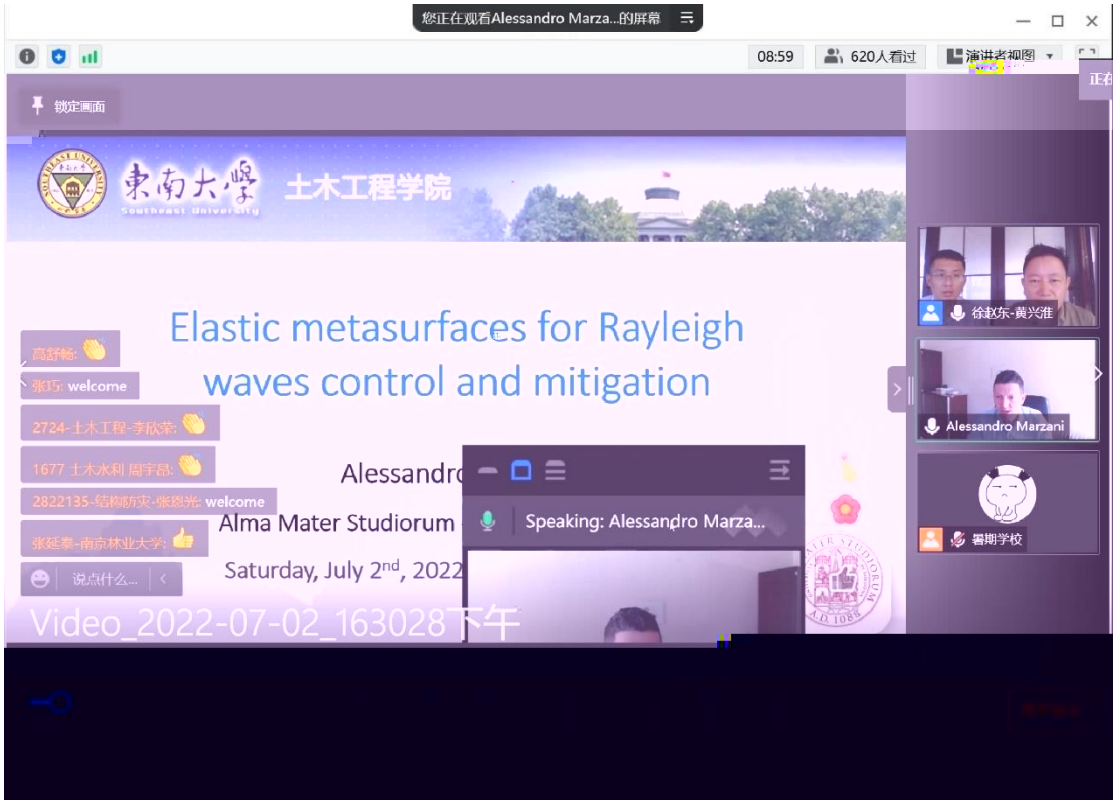
成员(33)

搜索成员

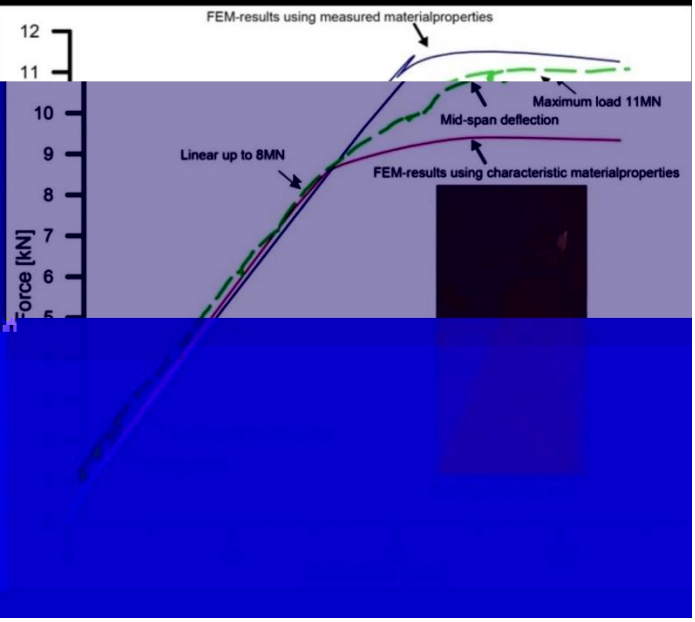
211273 曹张进 (我)

暑期学校 (主持人)


上午9:25 7月3日周日
68%
腾讯会议
847人看过 00:14
离开
13
BAMI-I
BURIED ASSET MANAGEMENT INSTITUTE - INTERNATIONAL
www.bami-i.com
Tom Iseley
• In 2003, formed in Atlanta's Department of Watershed Management as a result of inspiration & leadership by Mayor Shirley Franklin & Commissioner Jack Ravan.
• In June 2004, formed as non-profit orgainzation.
• Serves to provide a center of excellence for owners of underground water infrastructure to
Trenchless TECHNOLOGY
Water Advocates


您正在观看Alessandro Marza...的屏幕
08:59
620人看过
演讲者视图
锁定画面
東南大學
土木工程学院
Elastic metasurfaces for Rayleigh waves control and mitigation
Alessandro
Alma Mater Studiorum
Saturday, July 2nd, 2022
Speaking: Alessandro Marza...
徐赵东-黄兴淮
Alessandro Marzani
暑期学校
高舒畅:
张巧: welcome
2724-土木工程-李欣荣:
1677 土木水利 周宇昂:
2822135-结构防灾-张恩光: welcome
张延泰-南京林业大学:
说点什么...
Video_2022-07-02_163028下午

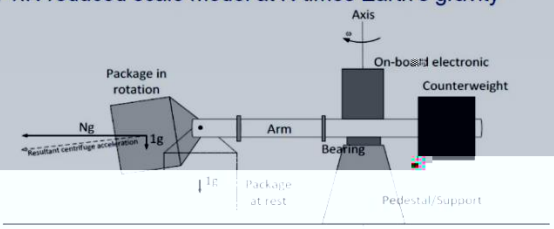
Åby Bridge
No fatigue failure
Much higher load
than expected



Why centrifuge modelling?

THE UNIVERSITY OF WESTERN AUSTRALIA

- Geotechnical behavior is strongly stress dependent
- Conducting reduced scale model testing at single gravity (1g) can lead to erroneous results
- Field scale stress levels (and hence the correct behaviour) can be obtained by spinning a 1:N reduced scale model at N times Earth's gravity



ediscovery of Sembawang Hot Spring

n Flow of Hot Spring

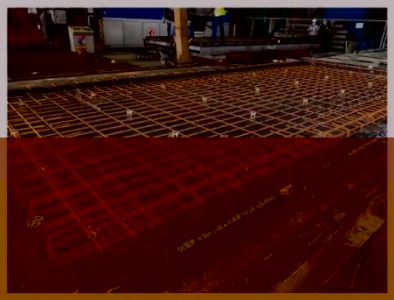
Hot spring has water pressure > 5 m above ground.

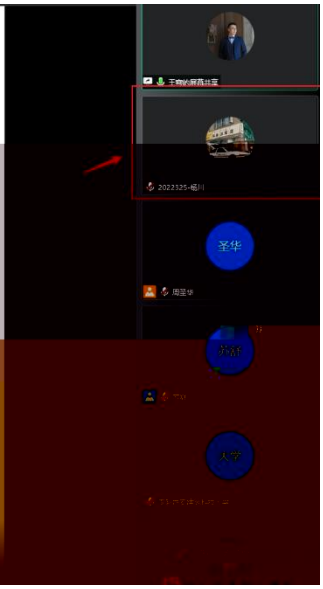
Artesi

QA/QC (PC formwork and rebar)

東南大學 SOUTHEAST UNIVERSITY

- Dimension of formwork
- Diameter and spacing of reinforcements





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PROJECT MANAGEMENT
EDUCATION AT THE UNIVERSITY OF MARYLAND

Understanding Industry 5.0

Defining Industry 5.0

正在讲话: Miroslaw Skibniew...

Miroslaw Skibniewski

录制暂停

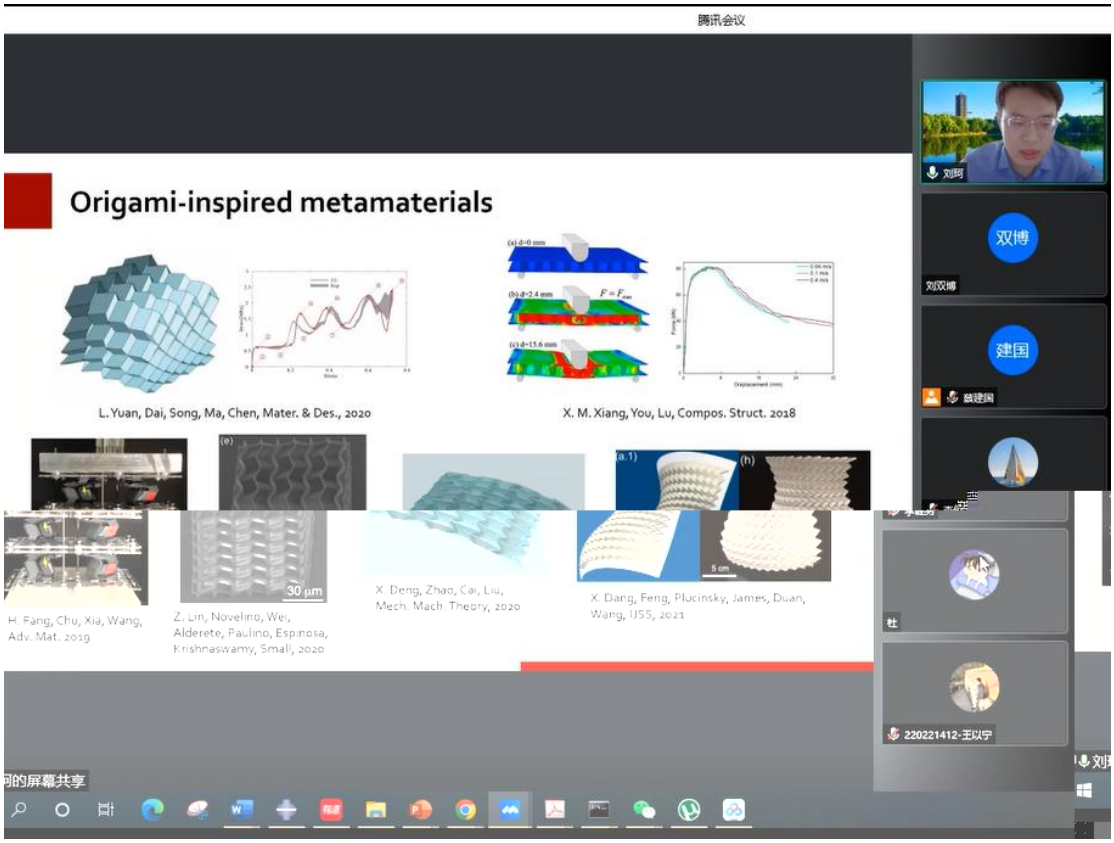
正在讲话: Zhong;

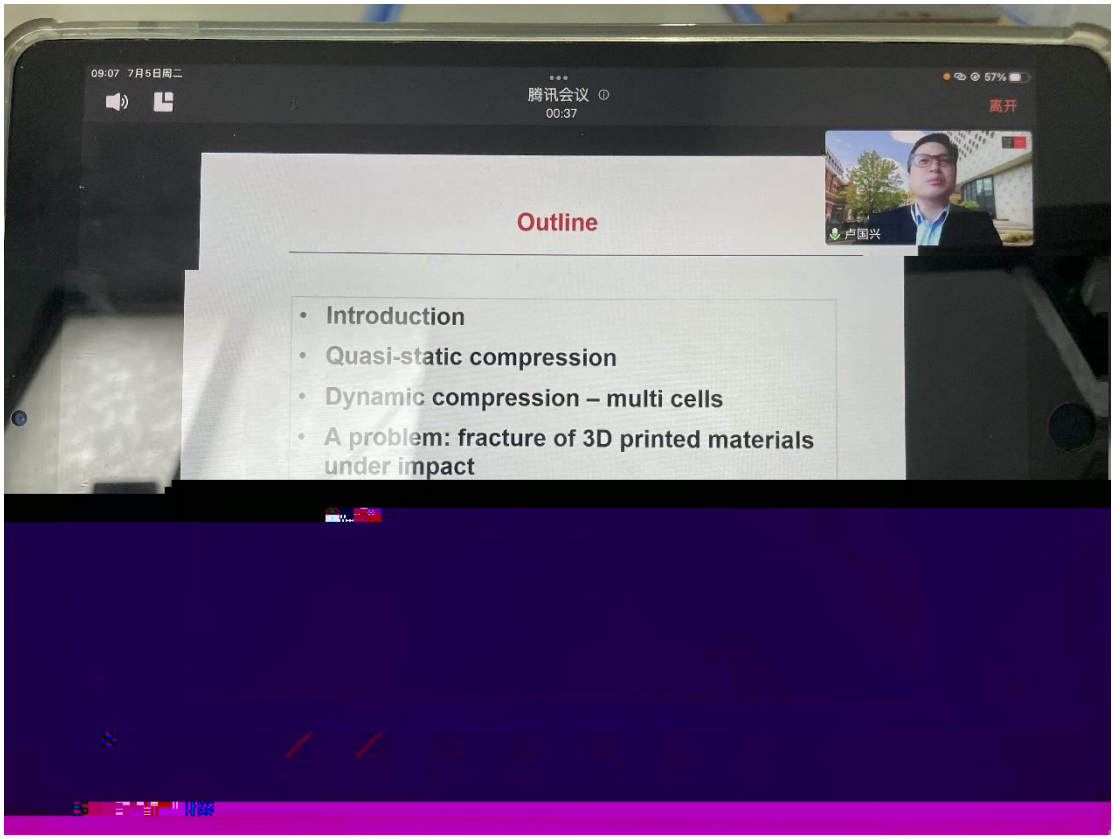
ZHONG YOU (由衷)

Professor of Engineering Science

Department of Engineering Science

Compact Folding of Flat Arrays Composed of Panels with Uniform Thickness


腾讯会议
Origami-inspired metamaterials
L. Yuan, Dai, Song, Ma, Chen, Mater. & Des., 2020
X. M. Xiang, You, Lu, Compos. Struct. 2018
H. Fang, Chu, Xia, Wang, Adv. Mat. 2019
Z. Lin, Novelino, Wei, Alderete, Paulino, Espinosa, Krishnaswamy, Small, 2020
X. Deng, Zhao, Cai, Liu, Mech. Mach. Theory, 2020
X. Dang, Feng, Plucinsky, James, Duan, Wang, IJSS, 2021
30 μm
5 cm
刘珂
双博
刘双博
建国
蔡建国
220221412-王以宁
的屏幕共享


09:07 7月5日周二
腾讯会议
00:37
57%
离开
卢国兴
Outline
Introduction
Quasi-static compression
Dynamic compression – multi cells
A problem: fracture of 3D printed materials under impact

1.2 B

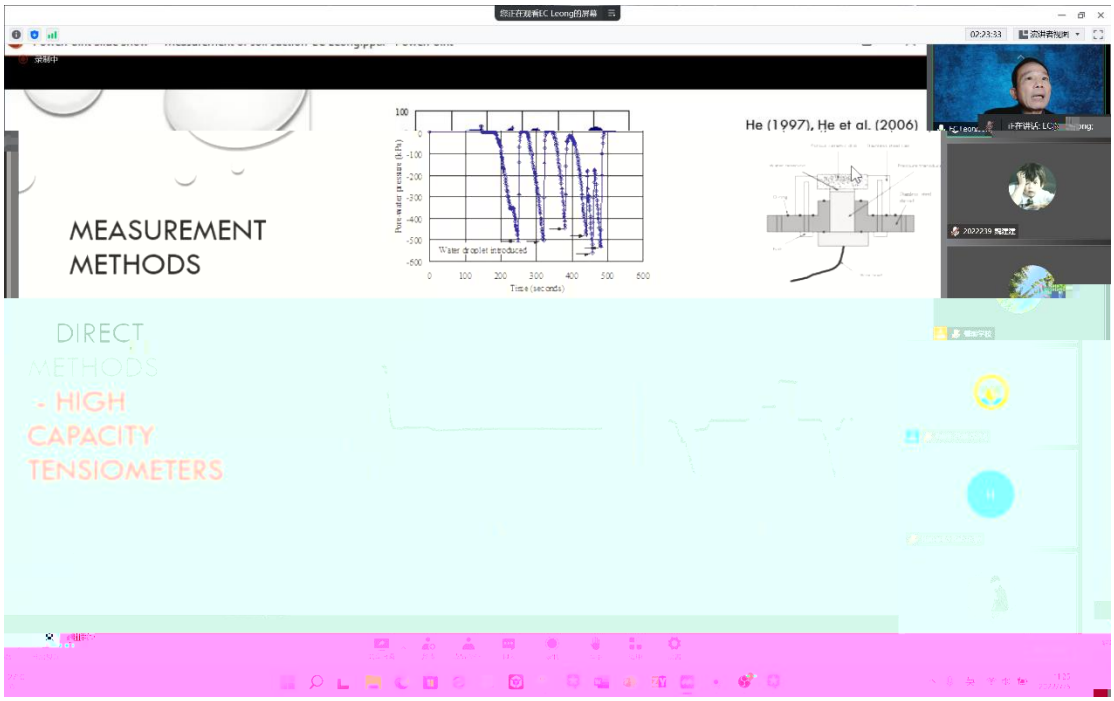
Frontiers in Industry: The seminars on intelligent construction and operation of key infrastructure

SRTP

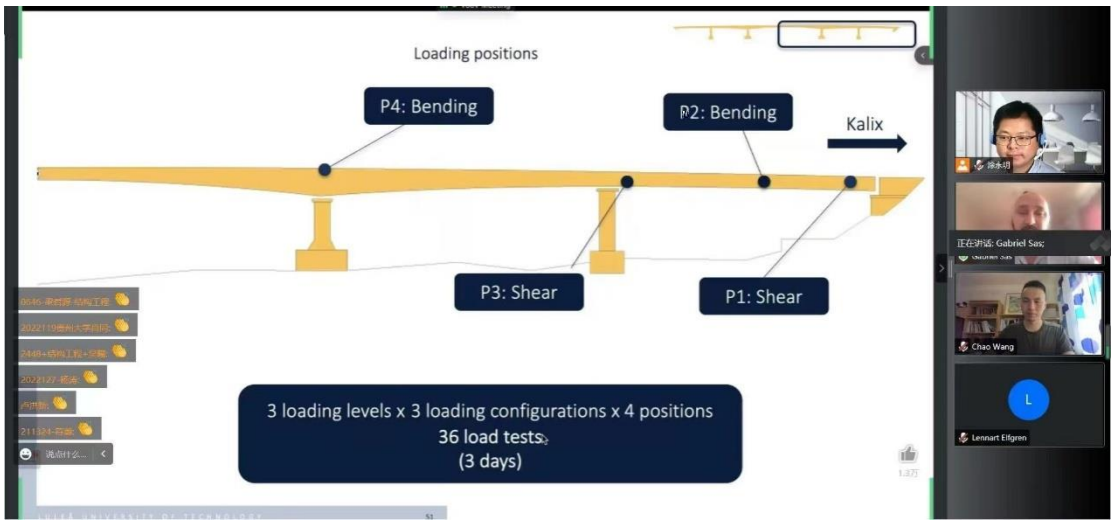
2.

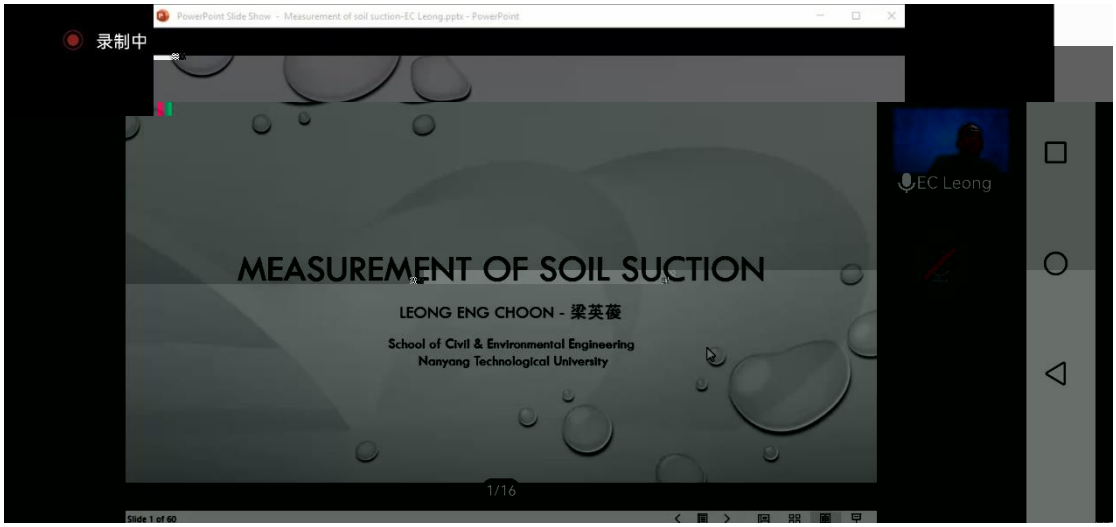
Date	Time	Presenter	Topic	Tencent Meeting
7.3		ct	o ct o ct	
7.3		ct l	ck	
7.3		l ck	ct ct ct ck ck	
7.3		ck	ct o o ct	
7.5		ct ct	ct o ct ct ct	

7.5			I ct ct	
7.5			o ct ct o o ct	


MEASUREMENT METHODS
He (1997), He et al. (2006)
DIRECT METHODS
- HIGH CAPACITY TENSIOMETERS


录制中
NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE
Application of unsaturated soil... mechanics to solving rainfall-induced slope failure
Presented by
Harianto Rahardjo
Nanyang Technological University
Singapore


Loading positions
P4: Bending
P2: Bending
Kalix
P3: Shear
P1: Shear
3 loading levels x 3 loading configurations x 4 positions
36 load tests
(3 days)


录制中
PowerPoint Slide Show - Measurement of soil suction-EC Leong.pptx - PowerPoint
EC Leong
MEASUREMENT OF SOIL SUCTION
LEONG ENG CHOON - 梁英菱
School of Civil & Environmental Engineering
Nanyang Technological University
1/16
Slide 1 of 60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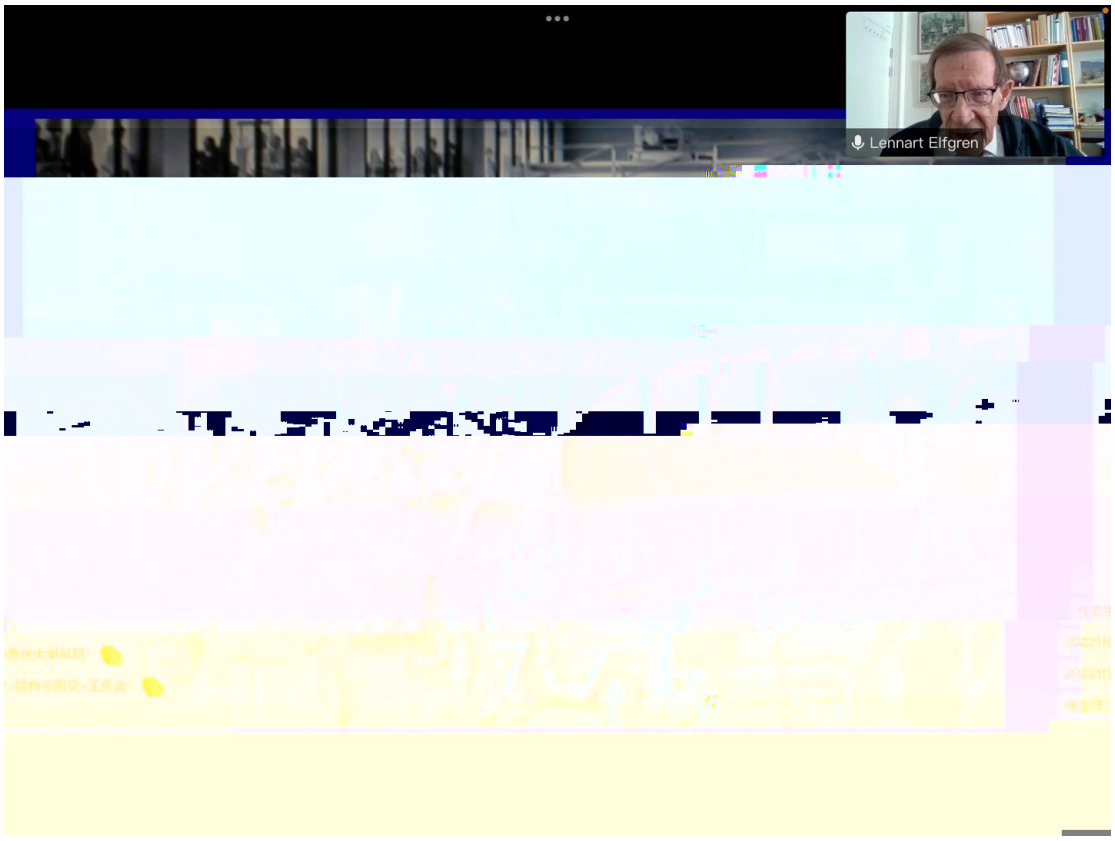
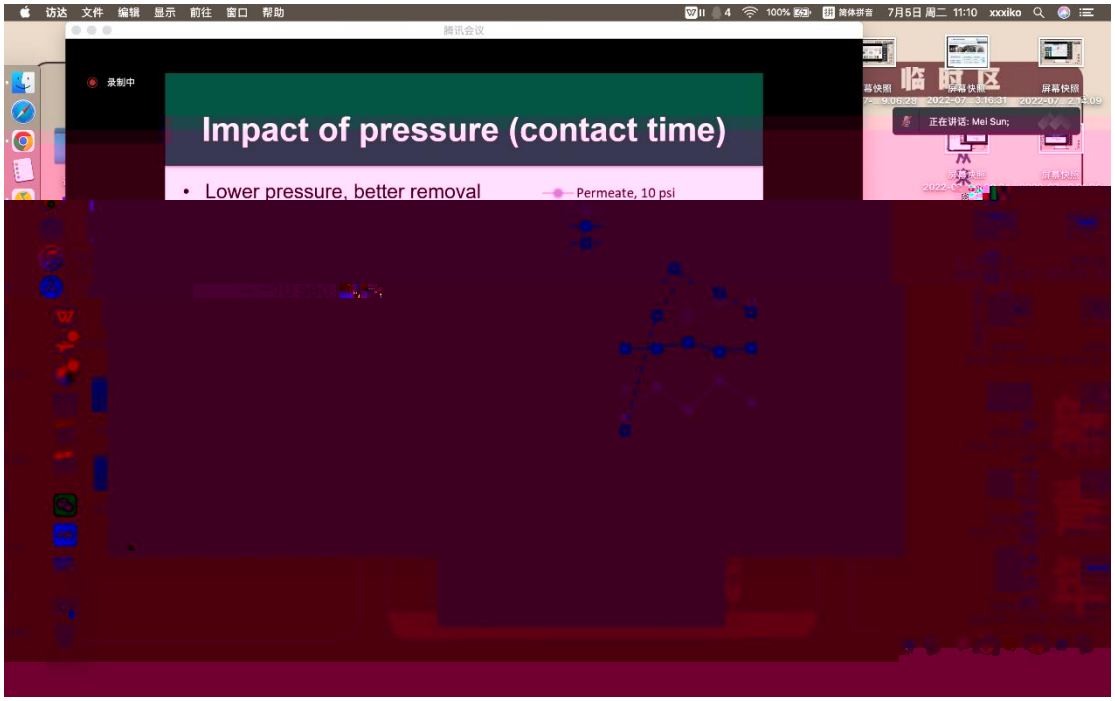
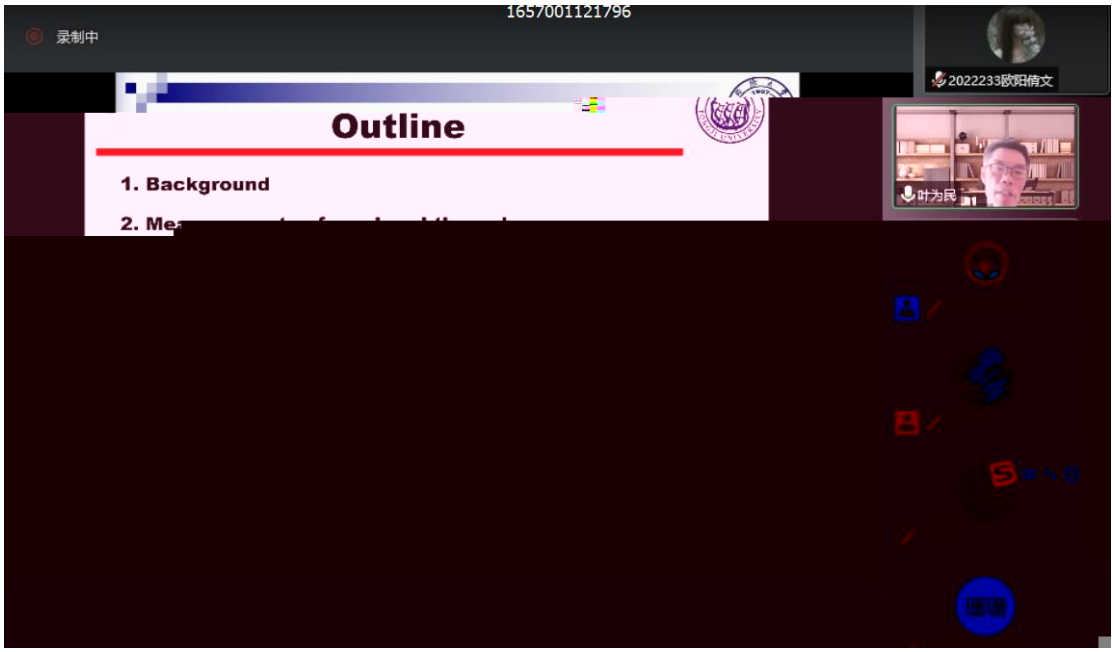
Université d'Ottawa | University of Ottawa
Xavier
Design of Foundations for Unsaturated Soils
By
Sai K. Vanapalli, Ph.D., P.Eng.
Professor of Civil Engineering, University of Ottawa
Ottawa, Canada
Presentation for Undergraduate/ Graduate Students of


您正在观看赵坚的屏幕
03:45
演讲者视图
正在讲话: 赵坚
Rock Engineering Stories - Hot Spring.pdf
Home
Tools
Rediscovery of Sauhbawang Hot Spring
Initiation of 1993-1994 Investigation


Lennart Elfgren


访达 文件 编辑 显示 前往 窗口 帮助
腾讯会议
录制中
Impact of pressure (contact time)
• Lower pressure, better removal
Permeate, 10 psi
正在讲话: Mei Sun;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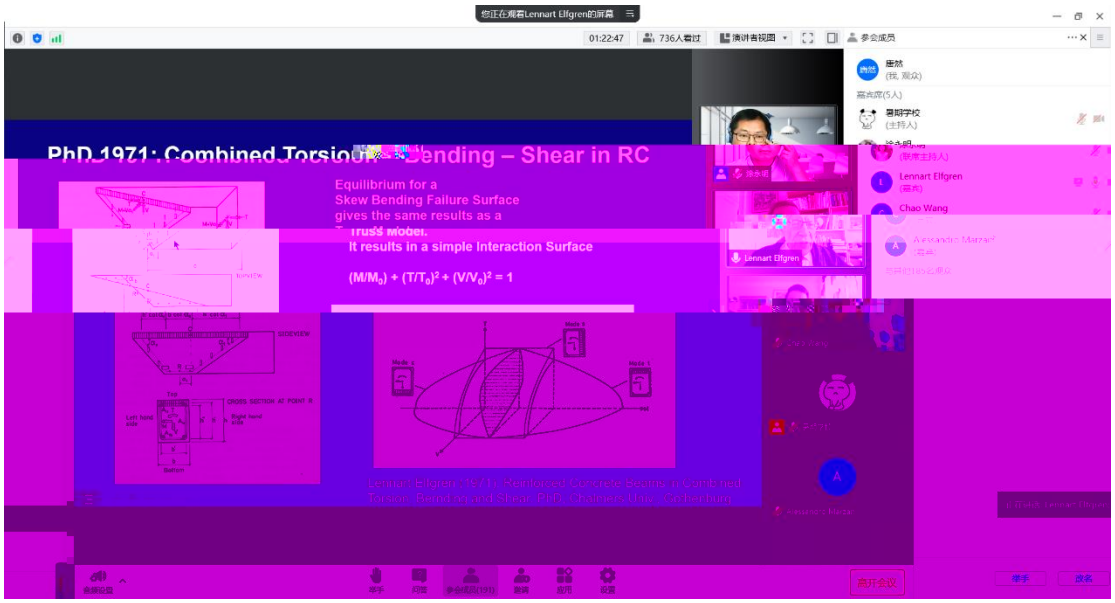
1657001121796
2022233欧阳倩文
Outline
1. Background
2. Me
叶为民


您正在观看Lennart Elfgren的屏幕
01:22:47
736人看过
演讲者视图
参会成员
PhD 1971: Combined Torsion, Bending – Shear in RC
Equilibrium for a
Skew Bending Failure Surface
gives the same results as a
Truss Model.
It results in a simple Interaction Surface
$(M/M_0) + (T/T_0)^2 + (V/V_0)^2 = 1$
Lennart Elfgren
Chao Wang
Lennart Elfgren 1971: Reinforced Concrete Beams in Combined Torsion, Bending and Shear. PhD, Chalmers Univ., Gothenburg

1.3 C

Frontiers in Market: Exploring the Transformation and Upgrading of the Construction industry in the Era of Digital Economy

SRTP

ct **Prof. Eddie C.M. Hui** o

M ct ct

3.

Date	Time	Topic
7.1	08:30-12:00	Intro to RE Economics
	14:00-17:00	
7.2	08:30-12:00	RE Market Analysis
	14:00-17:00	
7.3	08:30-12:00	Government Intervention
	14:00-17:00	
7.4	08:30-12:00	Government Policy and Rms33r-8n7m

ASCE Urban Planning and Development

1.4 D

Cross-cultural communication skills—Listening & Speaking for Civil Engineering

2022

+

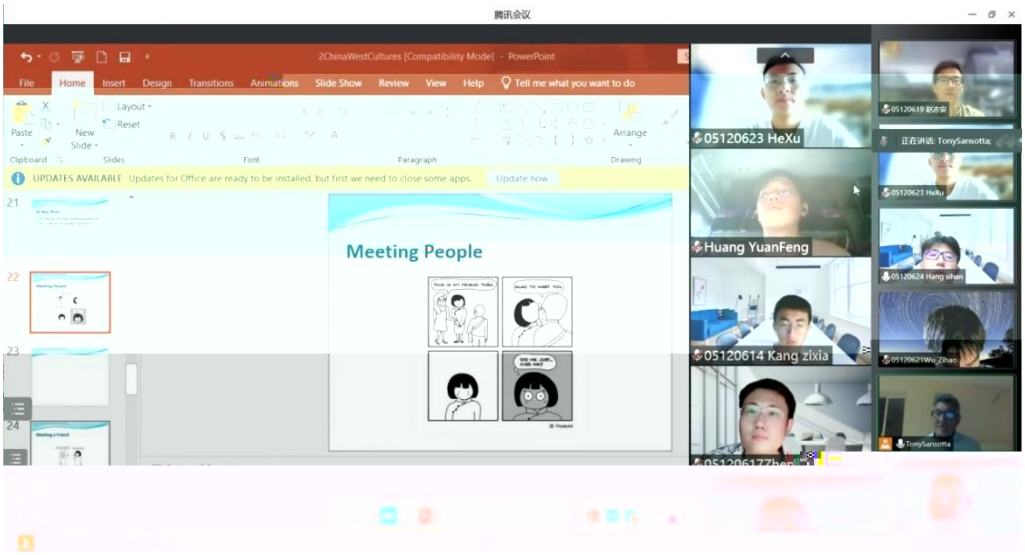
32

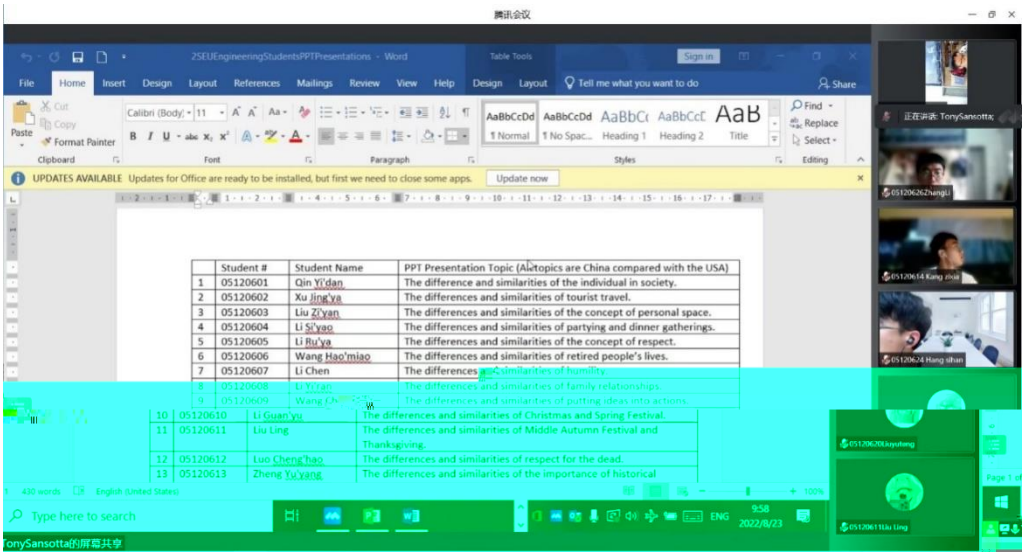
SRTP

ل **Tony Sansotta** ل

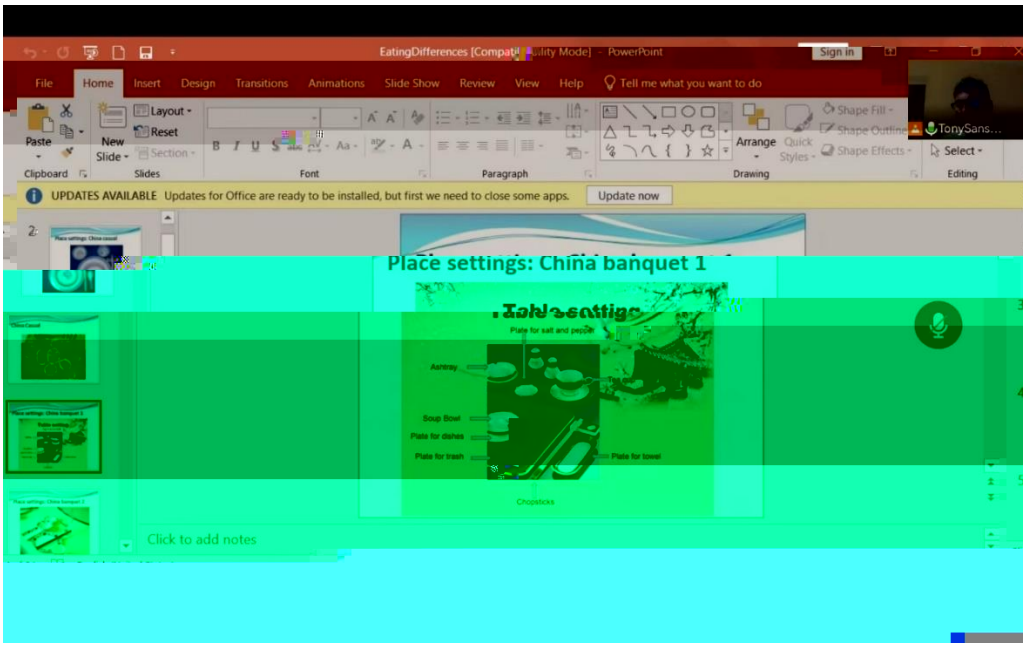
4.

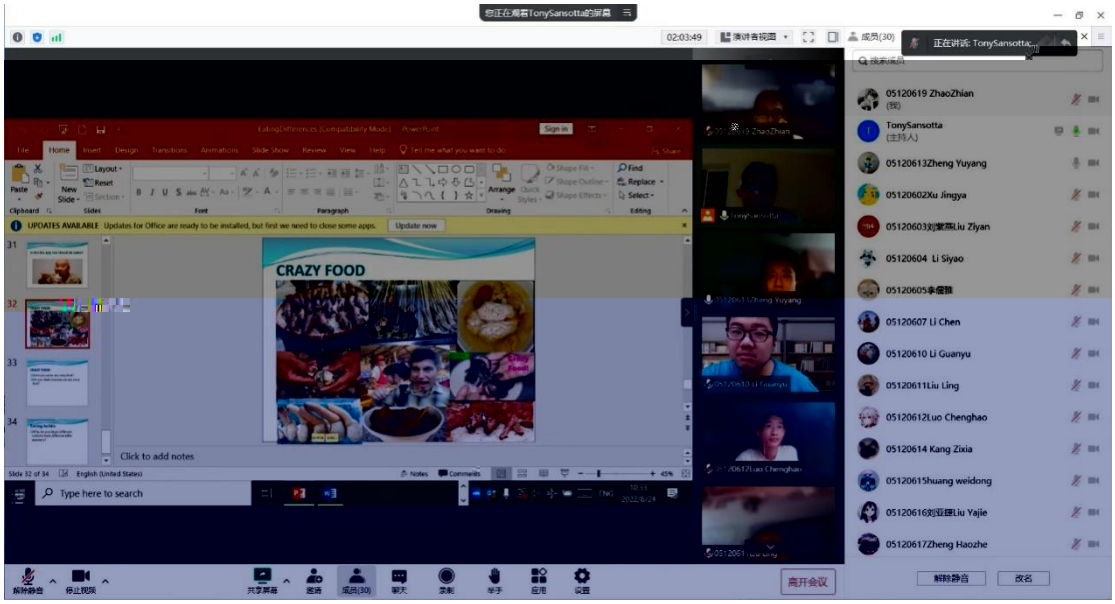
Date	Time	Topic
8.22	08:30-9:15	Lecture
	9:30-11:00	Oral workshop
8.24	08:30-9:15	Lecture
	9:30-11:00	Oral workshop
8.26	08:30-9:15	Lecture
	9:30-11:00	Oral workshop
8.29	08:30-9:15	Lecture
	9:30-11:00	Oral workshop
8.31	08:30-9:15	Lecture
	9:30-11:00	Oral workshop
9.2	08:30-9:15	Lecture
	9:30-11:00	Oral workshop





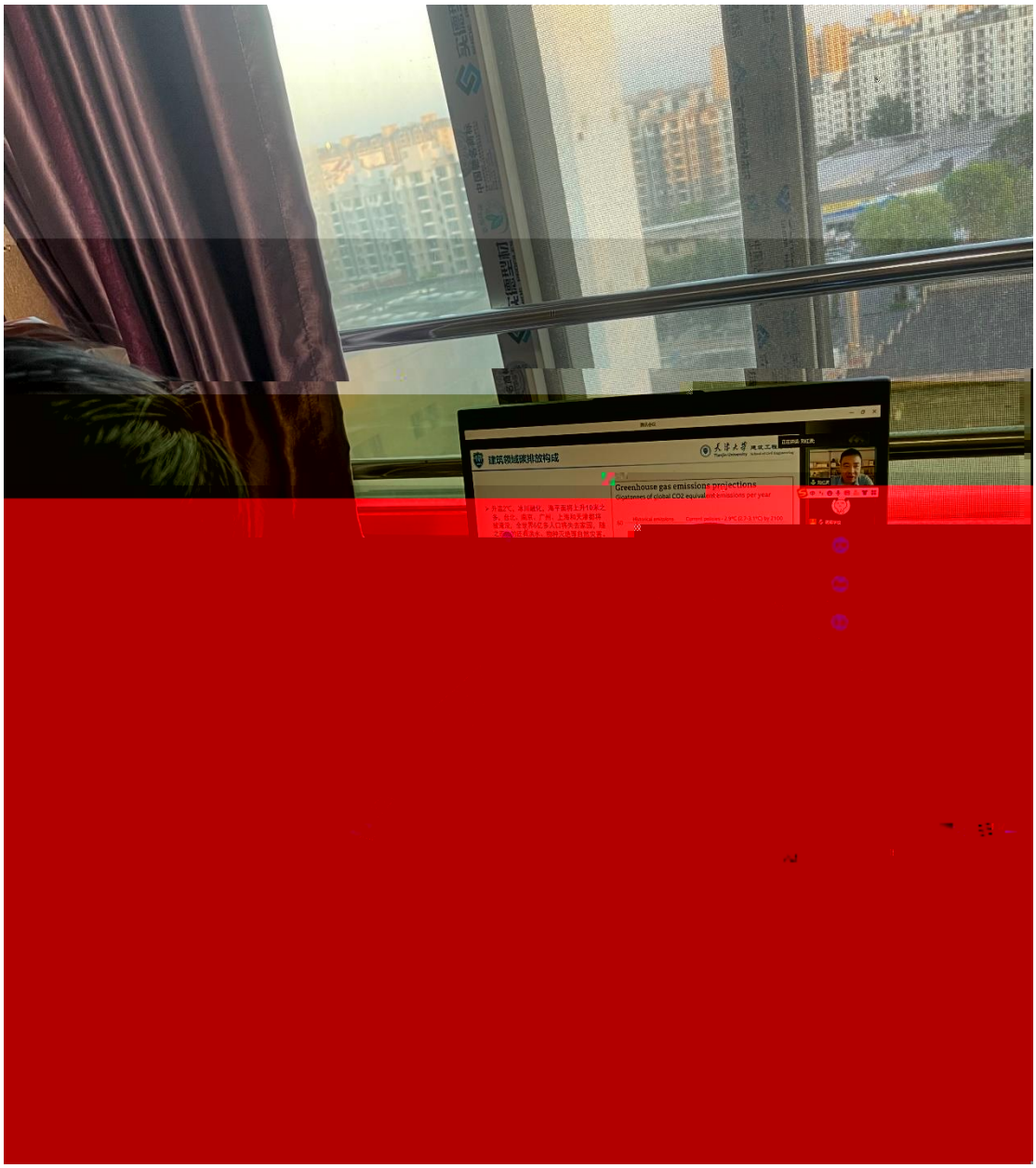
	Student #	Student Name	PPT Presentation Topic (All topics are China compared with the USA)
1	05120601	Qin Yi'dan	The difference and similarities of the individual in society.
2	05120602	Xu Jing'ya	The differences and similarities of tourist travel.
3	05120603	Liu Zi'yan	The differences and similarities of the concept of personal space.
4	05120604	Li Si'yao	The differences and similarities of partying and dinner gatherings.
5	05120605	Li Ru'ya	The differences and similarities of the concept of respect.
6	05120606	Wang Hao'miao	The differences and similarities of retired people's lives.
7	05120607	Li Chen	The differences and similarities of humility.
8	05120608	Li Yi'ran	The differences and similarities of family relationships.
9	05120609	Wang Chi'[illegible]	The differences and similarities of putting ideas into actions.
10	05120610	Li Guan'yu	The differences and similarities of Christmas and Spring Festival.
11	05120611	Liu Ling	The differences and similarities of Middle Autumn Festival and Thanksgiving.
12	05120612	Luo Cheng'hao	The differences and similarities of respect for the dead.
13	05120613	Zheng Yu'yang	The differences and similarities of the importance of historical




你正在观看TonySansotta的屏幕
02:03:49
演讲者视图
成员(30)
正在讲话: TonySansotta...
05120619 ZhaoZhian
(我)
TonySansotta
(主持人)
05120613Zheng Yuyang
05120602Xu Jingya
05120603刘紫燕Liu Ziyan
05120604 Li Siyao
05120605李俊雅
05120607 Li Chen
05120610 Li Guanyu
05120611Liu Ling
05120612Luo Chenghao
05120614 Kang Zixia
05120615Huang weidong
05120616刘亚娟Liu Yajie
05120617Zheng Haozhe
CRAZY FOOD
Click to add notes
Type here to search
解除静音
停止视频
共享屏幕
邀请
成员(30)
聊天
录制
举手
应用
设置
离开会议
解除静音
改名

2

2.1


建筑领域碳排放构成
Greenhouse gas emissions projections
Gigatonnes of global CO2 equivalent emissions per year

2.2

《Human-Centric Underground Workspaces》学习报告

家所提到的地下空间资源化利用的建议我非常感兴趣，通过课后查阅相关
关于苏志强专
学的深入交流，我对这个问题有了一个全新的认识。
资料以及与老师同
种极其宝贵的自然资源，但具有不可再生性、不可逆性。在城市规划中，
地下空间是一
地上空间的规划外，还要重点做好地下空间规划，而且要地面、地上、地下同
除做好地面和
设施配套不足等问题。
基础
“十三五”以来，随着新型城镇化步伐加快，有限的土地资源供给与不断增长的空间需
求之
间矛盾日益突出，国土空间全维度拓展利用成为城市可持续发展的必由之路。城市地下
空间
资源成为城市土地集约利用、改善交通环境、提升支撑系统能力等发展瓶颈的有效途径，
是推进
城市生产、生活、生态文明建设不可或缺的优质资源。“十三五”以来，我国新增地
下空间
建筑面积达到 8.44 亿平方米。我国城市地下空间已形成“三心三轴”的稳定发展结
构。其
中，“三心”指中国地下空间发展核心，即京津冀城市群、长江三角洲城市群以及珠
江三角
洲城市群；“三轴”指东部沿海发展轴、沿长江发展轴和京广线发展轴。我国城市地
下空间
发展综合实力排名前 10 位中东部占 8 席，中部、西部城市各有 1 席。据悉，我国共
颁布有
关城市地下空间的法律法规、规章、规范性文件共 400 余件。有关地下空间开发利用、
地下基
础设施的法规政策数量基于采矿

我国城市地下空间开发利用虽较欧美等发达国家起步晚，但目前已成为名副其实的地下空间开发利用大国，其发展源动力主要来自高效的政策力度、巨大的市场驱动、庞大的功能需求。我国地下空间功能类型主要包括地下交通、地下商业服务、地下市政、地下公管公服、

人防产业、地下物流产业、地下空间技术服务产业、轨道交通产业、地下装备技术产业、地下市政产业、地下空间智慧产业等。

对于苏志强专家所介绍的他们团队的一些研究我认为非常的详细与具体，比如先进行一些审查，类似于社会公众对地下空间的态度、室内工作空间的健康问题、人们对地下空间环境和心理的认知等等，还有一些新型的技术：眼球追踪技术，虚拟现实技术等等，可以看出苏志强专家团队在地下空间的“以人为本”的主要做了大公资入的研究

国土空间规划和各专项规划之中，成为城市国土空间进行有效管制的重要依据，地下空间规划技术力量也会随着国土空间规划全面展开和深入推进，继续保持增长的需求态势，这也对我国地下空间专业教育与技术人才培养提出更高的要求。

1.王骞：基于计算机视觉的建筑质量检测与三维模型重建

much attention,which leads us to the recent research of the speaker's team.A big part is

that low-cost to solve specific problems.and then comes to the heavy part which are applications.

completeness、safety/accessibility provisions.Above that,we come to know

Applications:

1.3Ddocumentation(documentation,maintence,repair,duplication)

2.geometry quality insecption-manufacturing phase

3.geometry quality inspection-construction phase

4.bulk excavation volume estimation which contains two sessions is before excavation to estimate the total amount of earthwork needed;the other is during excavation which is progress monitoring.

5.structural health monitoring-tunnels

6.3D model restruction which have three purposes:for the design of a new project;for the design of addition/alteration works;for building performance analysis.

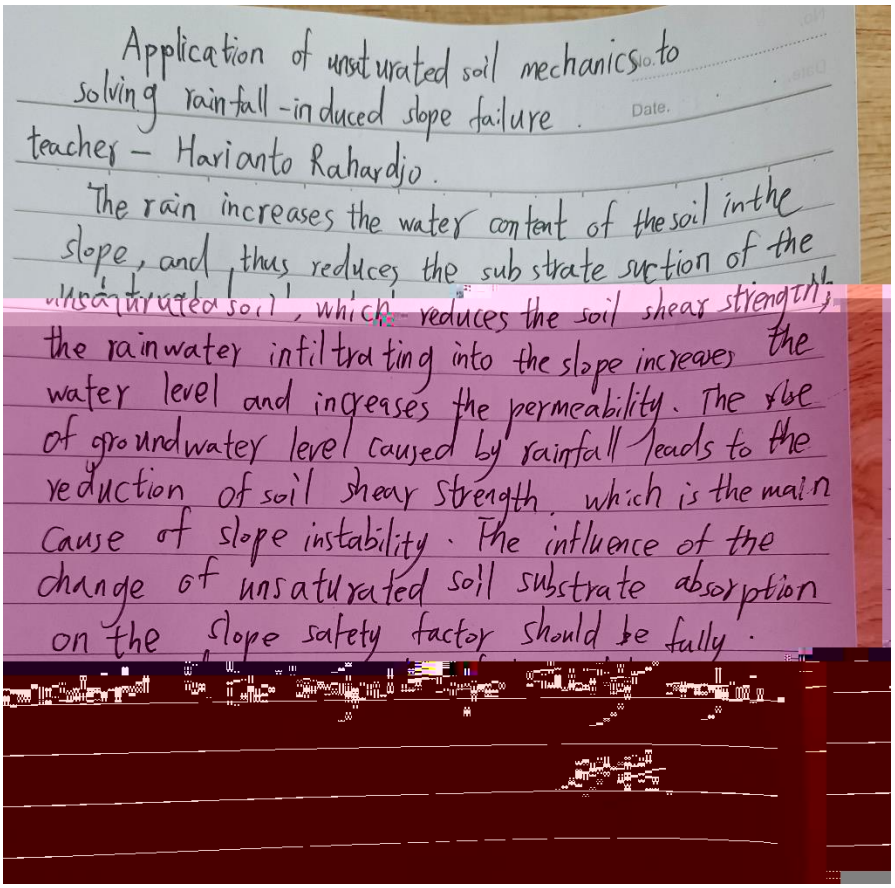
cessing and analysis are the future developments.

As for scan-to BIM,deep learning based classification from 2D image

ing,with the technology of computer vision and pattern recognition,w

Interdisciplinary.In order to do well in interdisciplinary field,I p

knowledge of Multidisciplinary to boost my creative.



Government Intervention in Land and Housing Markets: Do you agree?

221461 孙奥

今天听了 Eddie Hui 教授讲座《Government Intervention in Land and Housing Markets: Do you agree?》，在本科期间我就上过 Eddie Hui 教授的课程《房地产经济学》，收获到很多知识，今天能再一次听到 Eddie Hui 教授实属荣幸。

Eddie Hui 教授首先为我们抛出问题，全球经济学中争论最激烈的话题之一是政府对土地和住房市场的干预。支持自由市场体系的人主张，政府干预应该受到严格限制，而其他反对者则认为，政府干预有充分的理由。为什么政府真的要干预？这绝对必要吗？

Eddie Hui 教授从三个方面研究政府干预土地和住房市场的经济学，试图解决这些基本问题。首先，从理论上概述政府干预土地和住房市场的理由，例如外部性、交易成本、效用相互依赖性。其次，在实践中讨论政府干预市场的最常见方法和形式，如立法、补贴、税收、分区和租金控制。第三，在方法和途径的选择方面进一步理清了土地和住房市场的复杂性以及政府干预与市场的优缺点。

结构与防灾专题讲座报告

意大利的 Alessandro Marzani 教授介绍了使用共振超材料来减弱表面波的传播，以及它们作为抵御地震波和地面振动的共振屏障的应用。介绍了瑞利波与垂直谐振器的超表面的动态相互作用，以及能够将地震瑞利波偏转到介质中的大规模屏障的设计原则。并且分析了土壤分层对元表面动力学的影响。使我对超材料减振降噪的技术有了一定的了解。

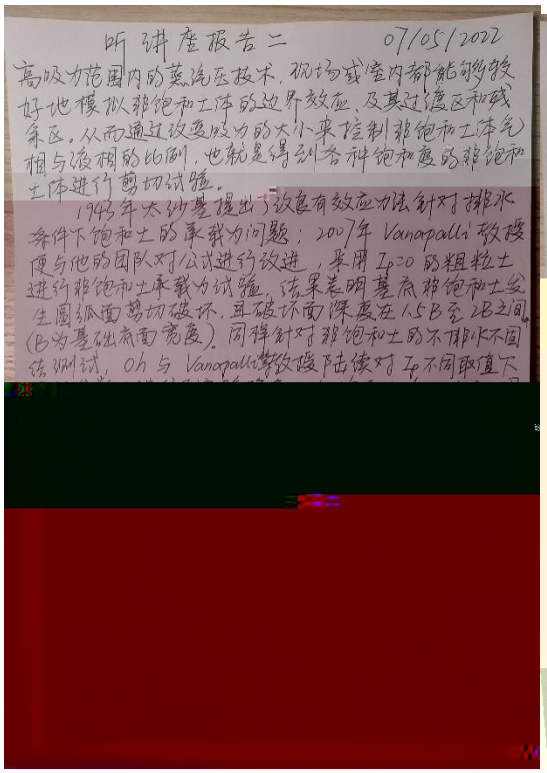
瑞典皇家工程科学院院士 Lennart Elfgren 介绍了瑞典北部四座桥梁从负载测试到失效的经验。包括两座铁路混凝土桥，一座铁路金属桁架桥和一座预应力混凝土公路桥。教授对设计中的普通规范方法进行了分析和比较，对设计中的薄弱环节进行了分析。

结构与防灾专题讲座报告

来自美国的 Tom Iseley 教授是地下基础设施系统的规划、设计和施工方面的专家。报告向我们介绍了推动水务公司从被动管理转向主动的演变。重点介绍了埋在地下的基础设施，因为大约 75%的挑战是在看不见的地方。讨论了管道状况评估技术以及可用于预防灾难的非开挖技术解决方案。

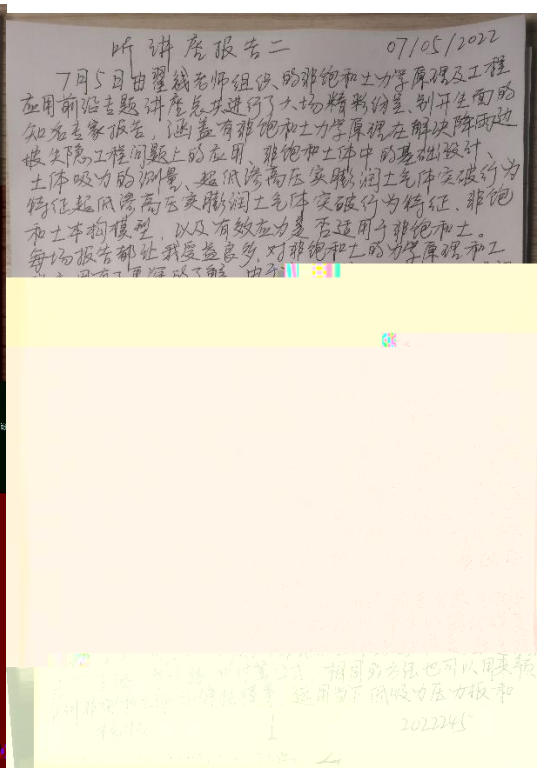
王立军高工向我们介绍了如何合理地将“通用规范”应用到结构设计中。在解释通用规范、推荐性标准、团体标准、企标、地标相互关系的基础上，结合型钢混凝土梁、矩形钢管混凝土柱、钢框架梁等设计案例，报告对这一问题进行了深入的剖析。并且报告介绍了对于主体结构构件、非结构构件和仪器设备满足设防地震正常使用要求的控制指标和设计方法。

来自天津大学的陈焱讲授向我们介绍了一门新兴的前沿科学——折纸科学。通过折叠或者展开，让纸张的结构、形状、体积或表面积发生改变，从而使其能实现更多的功能。陈焱教授提出了全新的超板非线性理论模型，破解了超板结构新兴以折叠这个困扰科学界和工程界五十余年的国际难题，让我们对这个有趣的新科学有了初步的认识。


听讲座报告二 07/05/2022

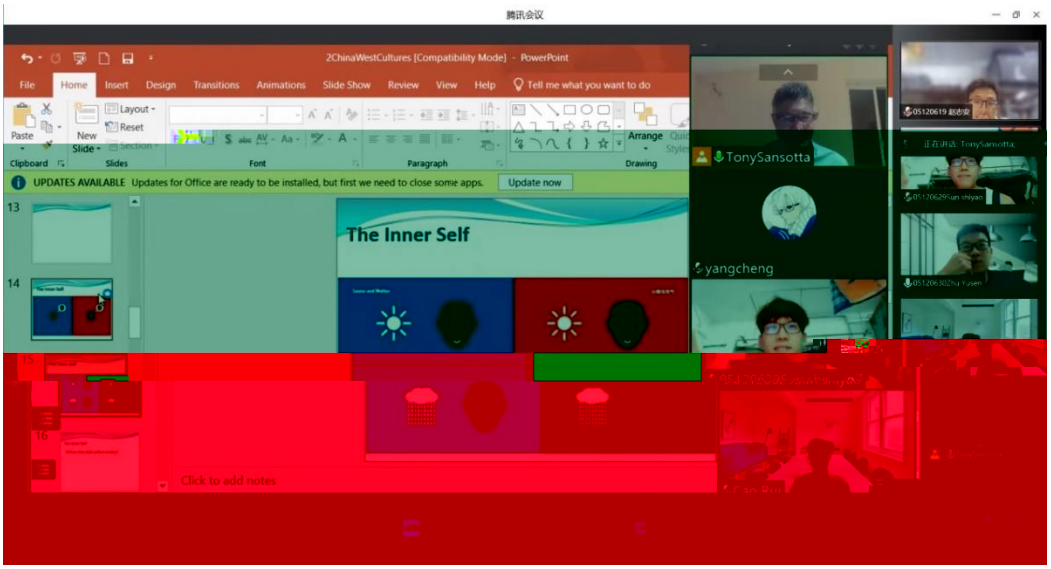
高吸力范围内的蒸汽压技术，从而或使内部能够较好地模拟非饱和土体的边界效应，及其过渡区和残余区，从而通过改变吸力的大小来控制非饱和土体气相与液相的比例，也就是得到各种饱和度的非饱和土体进行剪切试验。

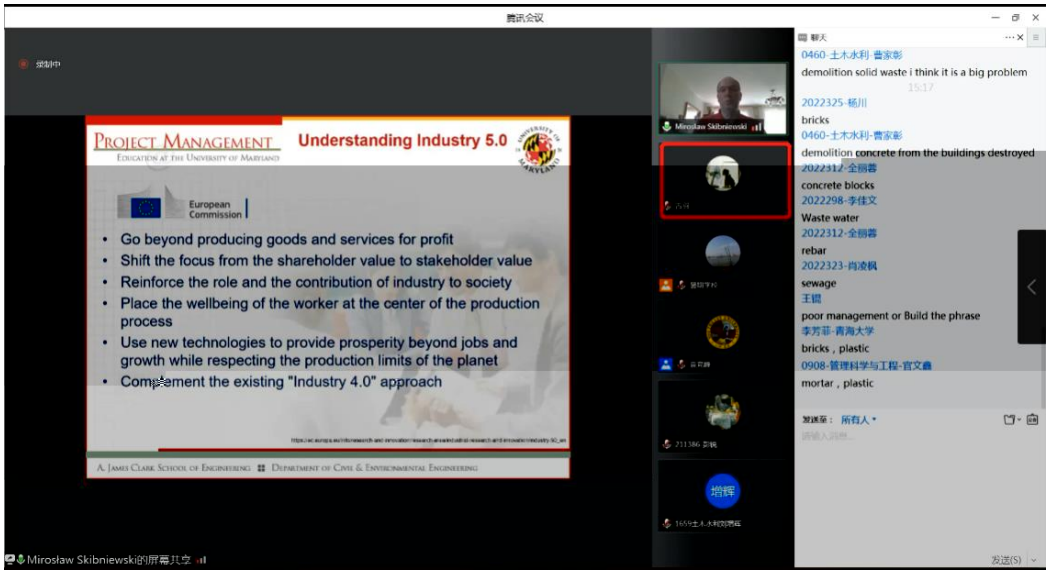
1943年太沙基提出了改良有效应力法针对排水条件下饱和土的承载力问题；2007年 Vanapalli 教授便与他的团队对公式进行改进，采用 Tp20 的粗粒土进行非饱和土承载力试验，结果表明基底非饱和土会产生圆弧面剪切破坏，且破坏面深度在 1.5B 至 2B 之间（B为基础底面宽度）。同样针对非饱和土的不排水不固结测试，Oh 与 Vanapalli 教授随后对 Tp 不同取值下

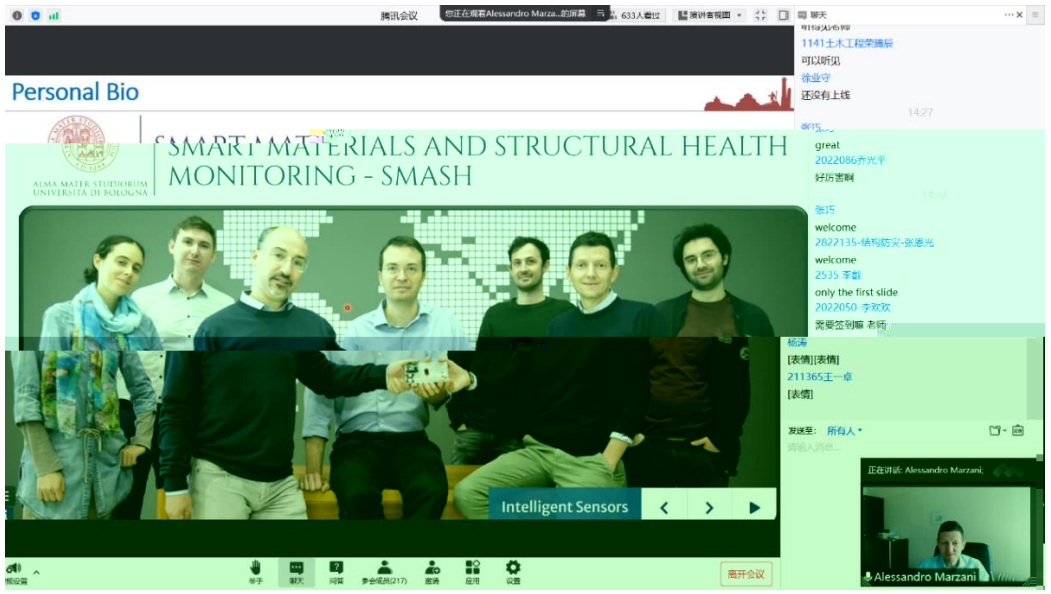

听讲座报告二 07/05/2022

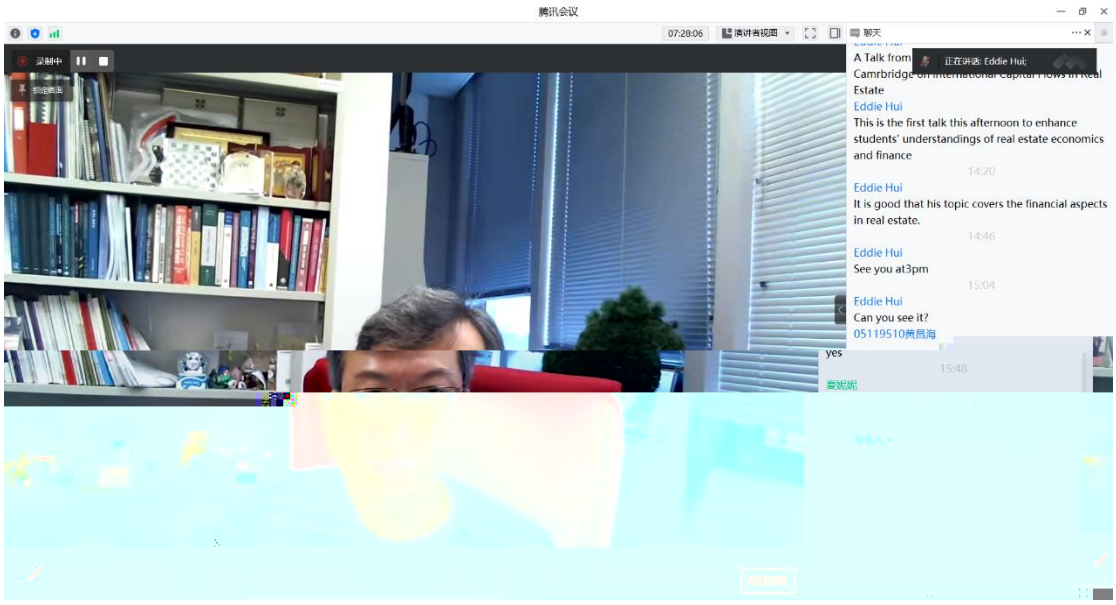
7月5日由翟线老师组织的非饱和土力学原理及工程应用前沿专题讲座终于进行了大场精彩的呈现开生面的知名专家报告，涵盖有非饱和土力学原理在解决降雨边坡失稳工程问题上的应用，非饱和土体中的基础设计、土体吸力的测量、超低渗高压实膨润土气体突破行为特征超低渗高压实膨润土气体突破行为特征、非饱和土本构模型，以及有效应力是否适用于非饱和土。每场报告都让我受益良多，对非饱和土的力学原理和工

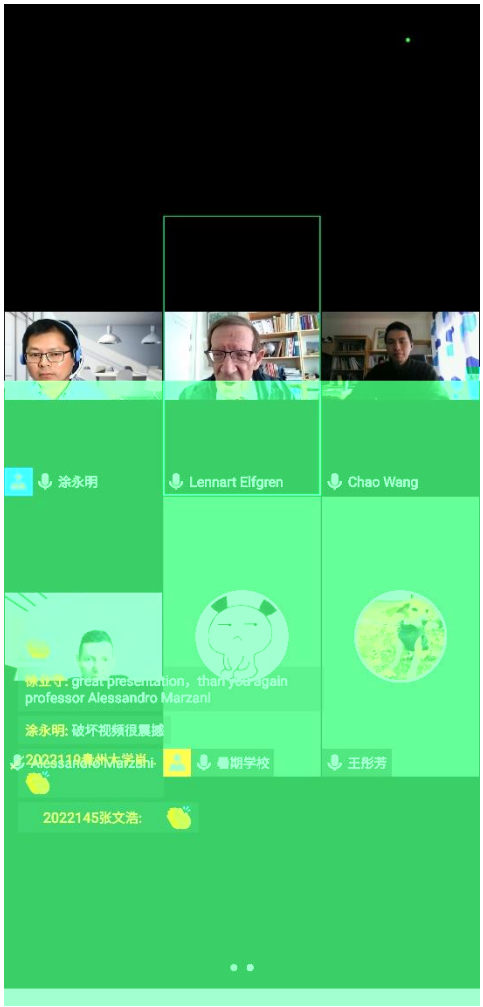
2.3


腾讯会议
2ChinaWestCultures [Compatibility Mode] - PowerPoint
UPDATES AVAILABLE Updates for Office are ready to be installed, but first we need to close some apps.
Update now
The Inner Self
TonySansotta
yangcheng
Click to add notes


腾讯会议
PROJECT MANAGEMENT
Understanding Industry 5.0
European Commission
Go beyond producing goods and services for profit
Shift the focus from the shareholder value to stakeholder value
Reinforce the role and the contribution of industry to society
Place the wellbeing of the worker at the center of the production process
Use new technologies to provide prosperity beyond jobs and growth while respecting the production limits of the planet
Complement the existing "Industry 4.0" approach
Mirosław Skibniewski的屏幕共享
0460-土木水利-曹家彰
demolition solid waste i think it is a big problem
2022325-杨川
bricks
demolition concrete from the buildings destroyed
concrete blocks
2022298-李佳文
Waste water
2022312-全丽馨
rebar
2022323-肖凌枫
sewage
王锴
poor management or Build the phrase
李芳菲-青海大学
bricks , plastic
0908-管理科学与工程-官文鑫
mortar , plastic


腾讯会议
Personal Bio
SMART MATERIALS AND STRUCTURAL HEALTH MONITORING - SMASH
Intelligent Sensors
1141土木工程荣腾辰
可以听见
徐业守
还没有上线
great
2022086乔光平
好厉害啊
welcome
2822135-杨秀防汉-张恩光
welcome
2535 李鹏
only the first slide
2022050 李双双
211365王一卓
正在讲话: Alessandro Marzani;
Alessandro Marzani


腾讯会议
07:28:06
演讲者视图
聊天
录制中
正在讲话: Eddie Hui;
A Talk from
Estate
Eddie Hui
This is the first talk this afternoon to enhance students' understandings of real estate economics and finance
14:20
Eddie Hui
It is good that his topic covers the financial aspects in real estate.
14:46
Eddie Hui
See you at3pm
15:04
Eddie Hui
Can you see it?
05119510黄昌海
yes
15:48


涂永明
Lennart Elfgren
Chao Wang
professor Alessandro Marzani
涂永明: 破坏视频很震撼
王彤芳
2022145张文浩:

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