華東師範大學 | 数学科学学院
School of Mathematical Sciences,East China Normal University

2019 年偏微分方程约束优化问题研讨会

程序册

2019 年 8 月 30 日-2019 年 9 月 2 日

为促进国内学者在最优控制、反问题、形状设计等偏微分方程约束优化问题的数值算法及相关数学问题等方面的学术交流，深入探讨当前研究进展，更好地开展未来的研究工作并促进学者之间的跨学科合作，兹定于 8 月 30 日-9 月 2 日于华东师范大学数学科学学院举办“2019 年偏微分方程约束优化问题研讨会”。会议主要交流各位专家在最优控制、反问题、形状设计等偏微分方程约束优化问题的理论、算法及应用等方面的最新研究成果。本次会议将邀请国内外知名专家及青年学者参加。

1.会议时间安排：2019 年 8 月 30 日（报到）--2019 年 9 月 2 日（离会）

会议报告地点：华东师范大学闵行校区数学楼 102 报告厅

2.报到

8 月 30 日 14:00-22:00，上海市闵行区剑川路 368 号，沪华国际大酒店

3.用餐及住宿

上海市闵行区剑川路 368 号，沪华国际大酒店

4.会议联系人：

羊丹平，邮箱：dpyang@math.ecnu.edu.cn; 手机号：13585952855

朱升峰，邮箱：sfzhu@math.ecnu.edu.cn; 手机号：18217582269

上海市核心数学与实践重点实验室

华东师范大学数学科学学院

Program

8 月 30 号周五下午晚上，报到注册		
18：00-19：30	晚餐	
8 月 31 号，周六		
8：20 - 8：30	开幕式：数学科学学院潘建瑜副院长致辞	
8：30-10：00，主持人：羊丹平		
8：30-9：00	状态受限随机最优控制问题自适应计算	刘文斌
9：00-9：30	Adaptive multi-fidelity surrogate modeling for Bayesian inference in inverse problems	周涛
9：30-10：00	Adaptive reconstruction for electrical impedance tomography with a piecewise constant conductivity	徐一峰
10：00-10：20	合影、茶歇	
10：20-11：50，主持人：杜宁		
10：20-10：50	A hybrid asymptotic and augmented compact FVM for singular differential equation and its applications in the control and interface problems	张志跃
10：50-11：20	最优控制中的切换时间优化问题	余长君
11：20-11：50	随机与不确定动态系统的协作能力和协作算法	李韬
11：50-14：30	午餐、休息	
14：30-16：00，主持人：程晓良		
14：30-15：00	Solving PDE constrained optimal control problems via FBSDEs	赵卫东
15：00-15：30	A novel solver for uniquely reconstructing a source in bioluminescence tomography	龚荣芳
15：30-16：00	Efficient model reduction methods for PDEs with random inputs	廖奇峰
16：00-16：20	茶歇	
16：20-17：50，主持人：周建伟		
16：20-16：50	Research Progress on adaptive stochastic Galerkin FEM for optimal control problem Governed by elliptic equations with random coefficients	孙同军
16：50-17：20	基于无网格方法的随机偏微分方程最优控制问题自适应方法	葛亮
17：20-17：50	奇摄动最优控制问题中的多尺度理论和方法	倪明康
18：00	晚餐	

9 月 1 号，周日		
8：30-10：00，主持人：陈焕贞		
8：30-9：00	Multiscale methods for optimal control problems with rough coefficients	陈艳萍
9：00-9：30	Analysis and approximation of Dirichlet boundary control of Stokes flow in energy space	龚伟
9：30-10：00	Deep Generative Learning	焦雨领
10：00-10：20	茶歇	
10：20-11：50，主持人：梁克维		
10：20-10：50	Neural autoregressive method on deep machine learning	吴庆标
10：50-11：20	A new idea for forecasting-based on data driven PDE and ODE	张书华
11：20-11：50	Image reconstruction and restoration with patch-based low rank regularization	黎芳
11：50-13：30	午餐、休息	
13：30-15：00，主持人：沈万芳		
13：30-14：00	A potential theory based Cartesian grid method	应文俊
14：00-14：30	Variational implicit-solvent predictions of the dry–wet transition pathways for ligand–receptor binding and unbinding kinetics	周圣高
14：30-15：00	Fast convergent splitting algorithms for phase retrieval with/without sparse prior	常慧宾
15：00-15：20	茶歇	
15：20-16：50，主持人：周兆杰		
15：20-15：50	A multi-mesh phase-field approach for optimal shape design of incompressible flows	胡贤良
15：50-16：20	An approach for topology optimization of damping layer under harmonic excitations based on piecewise constant level set method	张郑芳
16：20-16：50	Finite element approximations of shape gradients in optimal shape design	朱升峰
16：50-16：55	闭幕式	羊丹平
18：00	晚餐	
9 月 2 日，周一上午		
自由讨论，离会		

报告简介

状态受限随机最优控制问题自适应计算

刘文斌　英国肯特大学

摘要：本文讨论具有随机场系数的状态受限最优控制问题及自适应计算。首先在状态逐点和平均受限意义下推导控制的最优性条件，进而考虑随机 Galerkin 逼近。特别考虑了最优控制问题的随机无网格自适应算法。

Adaptive Multi-Fidelity Surrogate Modeling for Bayesian Inference in Inverse Problems

周涛　中科院

Abstract： Performing Bayesian inference via MCMC can be exceedingly expensive when posterior evaluations invoke the evaluation of a computationally expensive model, such as a system of PDEs. One strategy is to replace the forward model with a low-cost surrogate model; however, simply replacing the high-fidelity model with a low-fidelity model can lead to a lower approximation quality result. In this talk, we seek to address this challenge by introducing an adaptive procedure to construct a multi-fidelity polynomial chaos surrogate and explore the posterior simultaneously. More precisely, the new strategy starts with a low-fidelity surrogate model, and then correct it adaptively using online high-fidelity data. The key idea is to speed up the MCMC by combing, instead of replacing, the high-fidelity model with the low-fidelity model. We also introduce a multi-fidelity surrogate based on the deep Neural Networks to deal with problems with high dimensional parameters. Numerical experiments confirm that the proposed approach can obtain accurate posterior information with a limited number of forward simulations

Adaptive reconstruction for electrical impedance tomography with a piecewise constant conductivity

徐一峰　上海师范大学

Abstract： In this talk, I shall introduce a numerical method for electrical impedance tomography of recovering a piecewise constant conductivity from boundary voltage measurements. It is based on standard Tikhonov regularization with a Modica-Mortola penalty functional and adaptive mesh refinement using suitable a posteriori error estimators of residual type that involve the state, adjoint and variational inequality in the necessary optimality condition and a separate marking strategy. Several numerical examples are presented to illustrate the convergence behavior of the algorithm. This is a joint work with Prof. Bangti Jin at University College London, UK.

A hybrid asymptotic and augmented compact FVM for singular differential equation and its applications in the control and interface problems

张志跃　南京师范大学

Abstract： An accurate and efficient numerical method has been proposed for nonlinear singular two points boundary value problem. The scheme combines Puiseux series asymptotic technique with augmented fourth order compact finite volume method for the problem. Error estimates in different norms are obtained. Numerical examples comfirm the theoretical analysis and efficiency of the method. We also apply this method for solving singular control problems and interface problems, numerical experiments show that the method works well for solving those problems.

最优控制中的切换时间优化问题

余长君　上海大学

Abstract： Switching time optimization has been an important issue for various types of optimal control problems. In the traditional control parameterization approach, the control is approximated by a piecewise constant function, whose heights are decision variables to be optimized. The switching times are typically equidistant, with no flexibility to adaptively optimize their values. Thus, to obtain more accurate results, it is usually necessary to choose a very fine partition of the time horizon. Consequently, the finite-dimensional approximate optimization problem will consist of a large number of decision variables, which leads to a large optimal parameter select problem. In this talk, we will introduce two techniques for optimizing control switching time - direction optimization and time scaling transformation to reduce the number of subintervals required.

随机与不确定动态系统的协作能力和协作算法

李韬　华东师范大学

报告摘要： 动态系统的协作能力与协作算法的收敛性是分布式协作控制和大规模分布式人工智能的基本理论问题。对有限数据率下动态系统的协作能力，给出了存在基于量化观测器的通信协议和基于确定性等价原则的协同控制律的充分条件和必要条件，特别地，针对几类典型系统，建立了一系列“小容量信道定理”，表明对于大规模网络，确实存在给定信道带宽约束下的指数收敛的协作算

法。对于随机时变网络下带有通信噪声的随机逼近型分布式平均计算算法，建立了保证算法均方和几乎必然收敛的“随机联合连通”条件，建立了算法均方稳态误差与算法增益、网络图参数和信道噪声强度的定量关系。对分布式协作在线参数估计算法，建立了保证算法均方和几乎必然收敛的“随机时空持续激励”条件，特别地，对带有马尔可夫链型随机网络图和回归矩阵的情形，证明了若稳态图平衡且含有生成树，回归模型“时空联合可观测”，则每个估计器的状态均方且几乎必然收敛到参数真值。

Solving PDE constrained optimal control problems via FBSDEs

赵卫东　　山东大学

Abstract：In this talk, by nonlinear Feynman-Kac formula, we first give the relation between PDE constrained optimal control problems and FBSDE constrained optimal control problems, and then introduce some numerical schemes for solving FBSDE constrained optima control problems. In these schemes, the simplest Euler scheme is used to numerically solve the solutions of the forward stochastic differential equations, and high accurate numerical schemes are used to solve the backward stochastic differential equation (BSDE). Our numerical results show that the schemes are stable, high accurate, and effective for solving stochastic optimal control problems.

A novel solver for uniquely reconstructing a source in bioluminescence tomography

龚荣芳　　南京航空航天大学

Abstract ： In this talk, we consider inverse source problems arising in bioluminescence tomography (BLT). A brief introduction of the background of the BLT is given. Then some mathematical models and the related reconstruction frameworks are addressed. Mathematically, BLT is an under-determined inverse source problem which leads to no solution uniqueness. Particularly, one cannot distinguish between a strong source over a small region and a weak source over a large region. Therefore, it is particularly important to know the support Ω_s of the underlining light source p_* so that its strength could be reconstructed accurately. In the literature, Ω_s is assumed to be given. Practically, we only get an approximation Ω_a of it, known from some a priori information. The accuracy of Ω_a affects largely the onein approximate solutions of p_*. Therefore, in this talk, a novel functional is proposed and the problem is transferred to a minimization one. Also, a new time-dependent model is proposed motivated by the solution uniqueness. Numerical results show that the proposed method is feasible and effective. This is a joint work with Prof. Weimin Han of University of Iowa, and Xiaoliang Cheng of Zhejiang University

Efficient Model Reduction Methods for PDEs with Random Inputs and Applications for Bayesian Inversion

廖奇峰　上海科技大学

Abstract：Over the past few decades there has been a rapid development in numerical methods for solving partial differential equations (PDEs) with random inputs. This explosion in interest has been driven by the need of conducting uncertainty quantification for practical problems. In particular, uncertainty quantification for problems with high-dimensional random inputs gains a lot of interest. It is known that traditional Monte Carlo methods converge slowly. New spectral methods such as polynomial chaos and collocation methods can converge quickly, but suffer from the so-called ``curse of dimensionality". Taking the sparse grid collocation method for example, when the probability space has high dimensionality, the number of points required for accurate collocation solutions can be large, and it may be costly to construct the solution. We first show that this process can be made more efficient by combining collocation with reduced basis methods, in which a greedy algorithm is used to identify a reduced problem to which the collocation method can be applied. We demonstrate with numerical experiments that this is achieved with essentially no loss of accuracy. To further resolve problems with very high-dimensional parameters, we next develop hierarchical reduced basis techniques based on an ANOVA (analysis of variance) decomposition of parameter spaces. Moreover, our reduced basis ANOVA approach can provide an efficient surrogate for high-dimensional Bayesian inverse problems. This is joint work with Howard Elman of the University of Maryland, Guang Lin of Purdue University, and Jinglai Li of the University of Liverpool.

Research Progress on Adaptive Stochastic Galerkin FEM for Optimal Control Problem Governed by Elliptic Equations with Random Coefficients

孙同军　山东大学

Abstract：In this talk, we introduce the problems we have met in the research on adaptive stochastic Galerkin FEM for optimal control problem governed by elliptic equations with random coefficients. By finite-dimensional noise assumption, the model problem is represented as deterministic equations in finite-dimensional parameter space (also named as probability space), and then discretized by Galerkin finite element method both in the parameter space and the physical space. The main difficulty is how to derive a posteriori error estimators for the parameter space. For the physical space, the a posteriori error estimators can be derived as usual. We present one trial way. Based on the derived estimators, an adaptive refinement strategy is designed which allows to steer the polynomial degree adaption in the parameter space, and the finite element mesh refinement in the physical space. Finally, numerical examples are presented to illustrate our theoretical results.

基于无网格方法的随机偏微分方程最优控制问题自适应方法

葛亮　济南大学

Abstract：In this talk, a stochastic galerkin method based on meshfree method are developed to approximate elliptic optimal control problem with random coefficients in state equation. The physical space for this problem is discretized by finite element method, and the probability space is discretized by meshfree method based on compactly supported radial function. The discretized optimal control is given for this method. A posteriori error estimates are derived for the state, the co-state and the control variables. Numerical examples are presented to illustrate the theoretical results.

奇摄动最优控制问题中的多尺度理论和方法

倪明康　华东师范大学

摘要：由实际问题所得到的最优控制模型往往都含有多个参数，在进行无量纲化之后，通常可以转化为含有小参数的奇摄动最优控制问题，一般有两种办法可以进行研究。第一是利用庞特里亚金极大值原理把奇摄动最优控制问题转化为含有小参数的奇摄动微分动力系统，随后根据吉洪诺夫定理或者瓦西里娃方法， 用边界层函数法求出奇摄动微分动力系统的多尺度解。这类方法的缺点在于所得到的奇摄动微分动力系统往往非常复杂，而求解边值问题也并非易事。而且，在求解过程中，不能很好地运用和解释原问题所给出的条件。由此就产生了第二种方法，即直接展开法。我们首先构造形式的多尺度解，它们通常由正则部分、边界层部分和内部层部分组成，通常每一部分的尺度不同，有慢尺度和快尺度之分，我们把这种形式的多尺度解代入性能指标泛函和状态方程以及初边值条件。首先对它们按尺度进行分离，然后把形式的幂级数解代入，再根据 的整数幂进行展开，同时比较方程两端 的同次幂，得到一系列最优控制问题。显然，所得到的这些最优控制问题比原问题要简单得多，由此可以确定幂级数解的各项系数以完成形式多尺度解的构造，最后可以证明这类问题解的存在性和余项估计。它的好处在于所给出的条件都能有很好的解释，所得到的算法是个逐次迭代的过程，往往可以利用数学软件进行编程和实现。一般而言，它比数值解更优越，这是因为它有一个高精度的近似表达式，能更好地对原问题进行定性和定量的分析。

Multiscale methods for optimal control problems with rough coefficients

陈艳萍　华南师范大学

Abstract: This report concerns the convex optimal control problem governed by multiscale elliptic equations with arbitrarily rough L^{\infty} coefficients, which has important applications in composite materials and geophysics. We use one of the recently developed numerical homogenization techniques, the so-called Rough Polyharmonic Splines (RPS) and its generalization (GRPS) for the efficient resolution

of the elliptic operator on the coarse scale. Those methods have optimal convergence rate which do not rely on the regularity of the coefficients nor the concepts of scale-separation or ergodicity. As the iterative solution of the OCP-OPT formulation of the optimal control problem requires solving the corresponding (state and co-state) multiscale elliptic equations many times with different right hand sides, numerical homogenization approach only requires one-time pre-computation on the fine scale and the following iterations can be done with computational cost proportional to coarse degrees of freedom. Numerical experiments are presented to validate the theoretical analysis.

Analysis and approximation of Dirichlet boundary control of Stokes flow in energy space

龚伟　　中国科学院

Abstract: In this talk we introduce our recent results on Stokes Dirichlet boundary control problems on polygonal domain. We study the Dirichlet boundary control problems with the energy space method. We show the well-posedness of the formulation and derive the first order optimality conditions. For the approximations we use the Taylor-Hood finite elements, a priori error estimates are proved and some preliminary numerical examples are given.

Deep Generative Learning

焦雨领　　中南财经政法大学

Abstract: The inverse problem of learning underlying distributions from samples is one of the fundamental tasks in machine learning. In this talk we will present a new framework to learn the underlying generative models via bring the strength of optimal transportation, density ratio estimation and deep neural networks. First, the deep generative learning tasks is reformulated as finding the optimal transportation map between a simple distribution and the underlying target. The optimal transport map is characterized by the Monge-Ampere equation, which is hard to solve due to the nonlinearity even if we know the target. The infinitesimal linearized version of ?Monge-Ampere equation goes back to the continuity equation, whose vector fields is determined via the density ratio of the solution of continuity equation and the underlying target. We solve the continuity equation by estimating the density ratio iteratively via some sampling methods to overcome the difficulty of unknown target. We bound the error of the numerical scheme. Numerical simulation shows the proposed framework is stable and comparable with state-of-the art methods.

Neural autoregressive method on deep machine learning

吴庆标　浙江大学

Abstract: In this report we first introduces a class of probabilistic generative model based on undirected graph with special structure, namely Deep Boltzmann machine, its principle is expounded, and a new shape completion algorithm is proposed according to its characteristics. By setting the appropriate mask and sampling from the Deep Boltzmann machine, the proposed method can deal with the task without the prior information of the missing region. Then we introduce a new kind of probabilistic generative model, namely the Neural Autoregressive Distribution Esitmator, which is inspired by the Restricted Boltzmann Machine. Combining this model with the mean field method in the Deep Boltzmann machine training process, a better variational learning algorithm is proposed. Experiments show that the model trained with this algorithm has better performance than the original Deep Boltzmann machine.

A new idea for forecasting--based on data driven PDE and ODE

张书华　天津财经大学

Abstract: In this talk, on the basis of newwork and clustering, we try to establish a PDE model to predict The concentration and moving pathways of PM2.5. Also, we try to train ODE models to predict the concentration of PM2.5.

Image reconstruction and restoration with patch-based low rank regularization

黎芳　华东师范大学

Abstract: In this talk, we propose new decoupled variational models for image reconstruction and image restoration based on patch-based low rank regularization with nuclear norm minimization. Some mathematical analysis of the models and the algorithms are given. The numerical experiments and comparisons on various images demonstrate the effectiveness of the proposed methods.

A potential theory based Cartesian grid method

应文俊　上海交通大学

Abstract：This talk will be on a potential theory based Cartesian grid method. The method solves a boundary value or interface problem of PDE in the framework of second-kind Fredholm boundary integral equations. It avoids some limitations of the traditional boundary integral method. It does not need to know or compute the fundamental solution or Green's function of the PDE. Instead, it allows the solution of variable coefficients and nonlinear PDEs. The method evaluates boundary and volume integrals involved indirectly by solving equivalent but much simpler interface problems on Cartesian grids, based on properties of single, double layer boundary integrals and volume integrals in potential theory. In addition to its taking advantage of the well-conditioning property of the second-kind Fredholm boundary integral equations, the method makes full use of fast solvers on Cartesian grids. The Cartesian grid method can also accurately compute nearly singular and hypersingular boundary integrals. This talk will present recent developments of the method.

Variational implicit-solvent predictions of the dry–wet transition pathways for ligand–receptor binding and unbinding kinetics

周圣高　苏州大学

Abstract：Ligand–receptor binding and unbinding are fundamental biomolecular processes and particularly essential to drug efficacy. Environmental water fluctuations, however, impact the corresponding thermodynamics and kinetics and thereby challenge theoretical descriptions. We devise a holistic, implicit-solvent, multi- method approach to predict the (un)binding kinetics for a generic ligand–pocket model. We use the variational implicit-solvent model (VISM) to calculate the solute–solvent interfacial structures and the corresponding free energies, and combine the VISM with the string method to obtain the minimum energy paths and transition states between the various metastable (“dry” and “wet”) hydration states. The resulting dry–wet transition rates are then used in a spatially dependent multistate continuous-time Markov chain Brownian dynamics simulation and the related Fokker–Planck equation calculations of the ligand stochastic motion, providing the mean first-passage times for binding and unbinding. We find the hydration transitions to significantly slow down the binding process, in semiquantitative agreement with existing explicit-water simulations, but significantly accelerate the unbinding process. Moreover, our methods allow the characterization of nonequilibrium hydration states of pocket and ligand during the ligand movement, for which we find substantial memory and hysteresis effects for binding vs. unbinding. Our study thus provides a significant step forward toward efficient, physics-based interpretation and predictions of the complex kinetics in realistic ligand–receptor systems.

Fast convergent splitting algorithms for phase retrieval with/without sparse prior

常慧宾　天津师范大学

Abstract：Phase retrieval plays an important role in vast industrial and scientific applications, which is essentially a non-convex and possible non-smooth optimization problem mathematically. In this talk, we mainly concern how to design convergent splitting algorithm and further improve the quality of reconstructed images driven by the sparse prior. We first consider the bind ptychography problem. We address a general least squares model by maximum likelihood estimation and adopt fast alternating direction method of multipliers to solve it. Under mild conditions, we establish the global convergence to stationary points. Numerically, the proposed algorithm outperforms the state-of-the-art algorithms in both speed and image quality. Then we consider a noisy phase retrieval problem with measured intensities corrupted by strong Gaussian or Poisson noises. Sparse regularization methods, e.g. Total Variation, Dictionary Learning and BM3D filters, are utilized to denoise phaseless measurements, and as a result, the quality of recovery images is greatly increased from noisy (or incomplete) data. Due to the non-convexity of established models, we also discuss how to design fast splitting algorithms with convergence guarantee. This is a joint work with Stefano Marchesini in LBNL, Yifei Lou in UT Dallas, Michael K. Ng and Tieyong Zeng in HKBU.

A multi-mesh phase-field approach for optimal shape design of incompressible flows

胡贤良　浙江大学

Abstract：Optimal design for the shapes of fluid flow is very useful in various applications, and different approaches have been proposed to solve it numerically, such as the density-based approach, the level set method and the phase field method. In this talk, a multi-mesh scheme of phase field simulations for fluid-based shape optimization will be introduced. In our scheme, the fluid flow is governed by the incompressible Navier–Stokes equations, and a phase field variable is used to indicate material distributions, as well as the optimized shape of the fluid, which could be obtained by minimizing the certain regularized objective functional. Meshes with different element sizes are used for the finite element calculations on solving different partial differential equations. Numerical results show that our multi-mesh approach saves the computational efforts significantly without losing in accuracy.

An approach for topology optimization of damping layer under harmonic excitations based on piecewise constant level set method

张郑芳　杭州电子科技大学

Abstract：The topology optimization of a thin plate structure with bounded damping layer patches under external harmonic excitations to suppress the vibrations of specified points in the plate is investigated. The piecewise constant level set (PCLS) method is applied to represent the region with damping material and the region only with base material. Applying Melosh-Zienkiewicz-Cheung (MZC) element, the stiffness matrix, the mass matrix and the damping matrix are expressed in detail, where the global non-proportional damping matrix is considered. The functional derivative of the objective function (the squared vibration amplitudes of specified points in a plate) with respect to the PCLS function is deduced, by introducing the adjoint problems and applying matrix sensitivity analysis. The quadratic penalty method and the total variation regularization are utilized to fulfill the the volume constraint and to avoid checkerboard patterns, respectively. A penalty gradient algorithm is proposed. In numerical experiments, three rectangular plates with different boundary conditions and locations of the external excitations are investigated. Effects of the excitation frequency as well as the damping coefficients on topology optimization results are also discussed.

Finite element approximations of shape gradients in optimal shape design

朱升峰　华东师范大学

Abstract：Eulerian derivatives of shape functionals in optimal shape design can be written in two formulations of boundary and volume integrals. The former is widely used in shape gradient descent algorithms. The latter holds more generally, although rarely being used numerically in literature. For shape functionals governed by the Stokes equation and elliptic eigenvalue problems, we consider finite element approximations to the two types of shape gradients from corresponding Eulerian derivatives. We present thorough convergence analysis with a priori error estimates. The convergence analysis shows that the volume integral formula converges faster and offers higher accuracy. Numerical results with applications in optimal shape design are presented.

华东师范大学闵行校区数学楼(靠近莲花南路门-西门)

沪华国际大酒店：上海市闵行区剑川路 368 号

酒店和数学楼距离约 2 公里。会议期间，我们将安排短驳车接送与会人员。

8 月 31 日

上午 7:45 沪华酒店到数学楼， 11:50 数学楼到沪华酒店

下午 14:00 沪华酒店到数学楼，17:50 数学楼到沪华酒店

9 月 1 日

上午 8:20 沪华酒店到数学楼， 11:50 数学楼到沪华酒店

下午 13:10 沪华酒店到数学楼，17:50 数学楼到沪华酒店