

“供应链管理 with 对策论研究交流会”通知

为了提高我国学者在供应链管理 with 对策论理论研究 with 应用水平，清华大学方述诚讲席教授组、西南财经大学商学院和北京交通大学应用数学系将于 2007 年 12 月 21 - 22 日在清华大学举办 “供应链管理 with 对策论研究交流会”。会议特别邀请国内外知名学者就本领域最新发展 with 应用等专题进行报告和讨论。特邀报告人包括：赵修利教授 (Xiuli Chao, 清华大学/University of Michigan), 陈滨桐教授 (Bintong Chen, 清华大学, 西南财经大学/Washington State University), 陈方若教授 (Fangruo Chen, 上海交通大学/Columbia University), 卓训荣教授 (Hsun-Jung Cho, 台湾交通大学), 谢金星教授 (Jinxing Xie, 清华大学), 徐福缘教授 (Fuyuan Xu, 上海科技大学), 徐以汎教授 (Yifan Xu, 复旦大学), 张汉勤教授 (Hanqin Zhang, 中国科学院)。

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资助单位

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报告题目

序号	时间	主讲	题目
报告 1	12月21日 13:30-14:10	陈方若教授	Recent Developments in Supply Chain Management
报告 2	12月21日 14:30-15:10	陈滨桐教授	Channel Analysis under Rebate Promotion
报告 3	12月21日 16:00-16:40	张汉勤教授	The Effect of Leadtime and Demand Uncertainties (r, q) Inventory Systems
报告 4	12月21日 17:00-17:40	徐福缘教授	Introduction of Some Research Work on SDN
报告 5	12月22日 8:00-8:40	谢金星教授	Coop Advertising Games in a Manufacture-retailer Supply Chain
报告 6	12月22日 9:00-9:40	赵修利教授	Study of Name-Your-Own-Price Channel in a Multi-Channel Market
报告 7	12月22日 10:20-11:00	徐以汎教授	Dynamic Production and Pricing Control for a Make-to-Stock Manufacturing Site with Average Profit Criterion
报告 8	12月22日 11:20-12:30	卓训荣教授	The Solution Methods of Stackelberg Game

注意事项:

- 1、本会议的工作用语为中文。为鼓励学术讨论，每个报告后的 20 分钟为讨论时间。
- 2、会议免收会务费。
- 3、本次会议采用圆桌形式交流。为参加会议的博士后、博士和硕士研究生预留 50 人左右座位。请有意参会者于 2007 年 12 月 10 日前将回执（最好用 email）发回，回执中导师的电话和 email 地址必须填写，以确保不浪费我们的预定资源。我们将于 12 月 12 日通过 email 通知是否同意参加的信息。
- 4、本次会议在清华大学校内举办，原则上不安排住宿，我们已经在校内近春园宾馆（到会议地点 300 米左右）预留部分房间，一类为标准间（两个床位），每间 298 元/晚，另外为普通二人间，每间 140 元/晚。需要者请于 12 月 14 日前同近春园宾馆前台（电话：010-62784008）联系，请说明会议名称。
- 5、12 月 21 日上午 10:00-12:00 我们将在数学科学系理科楼大厅安排报到事宜。

参加会议回执

姓名		性别		教师/博士生/博士后/硕士生	
所在学校		电话		电子邮箱	
请研究生填写以下内容					
导师姓名		导师联系电话			
导师电子邮箱		是否经导师同意参加研讨会			

报告人及报告内容简介

赵修利教授: Xiuli Chao is professor of Industrial and Operations Engineering at University of Michigan at Ann Arbor. His research interests include queueing, scheduling, financial engineering, inventory control, and supply chain management. Prior to joining University of Michigan he was on the faculty of the Department of Industrial and Systems Engineering at North Carolina State University, and from 2000 to 2003 he served as the co-director of the Interdisciplinary Operations Research Programs. He is the co-author of two books, "Operations Scheduling with Applications in Manufacturing and Services" (Irwin/McGraw-Hill, 1998), and "Queueing Networks: Customers, Signals, and Product Form Solutions" (John Wiley & Sons, 1999). Chao received the 1998 Erlang Prize from the Institute for Operations Research and Management Sciences (INFORMS), the Outstanding Overseas Young Chinese Scientist Award from National Natural Science Foundation of China in 2002, the Outstanding Overseas Scientist Award from Chinese Academy of Sciences in 2004, and in 2005 he received the David F. Baker Distinguished Research Award from Institute of Industrial Engineers (IIE).

报告题目: Study of Name-Your-Own-Price Channel in a Multi-Channel Market

摘要: Few papers have explored the name-your-own-price (NYOP) mechanism in a multiple channel environment. In this work we study the optimal reserve prices in a single-channel -- NYOP only -- scenario and a dual-channel scenario with an NYOP channel and an NYOP-retailer-own list-price channel. We also investigate a double-bid business model in which the consumers can bid twice in the NYOP channel, and compare it with the single-bid case. The paper aims at achieving some basic understanding on the potential benefits of introducing a list-price channel by the NYOP retailer, and on the potential gain of adding a second bid option to a single-bid system. We show that consumers tend to bid lower initially if they may bid twice; however, a double-bid scenario can perform better than a single-bid scenario in both single-channel and dual-channel situations. The optimal reserve price in the double-bid scenario is no less than that in the single-bid. The coexisting list-price channel could push up the reserve prices in both single-bid and double-bid scenarios. The result of this paper offers insights on the NYOP type of opaque market and may help retailers in further revising its operation mechanism. This is a joint work with Dr. George (Gangshu) Cai of Kansas State University.

陈滨桐教授: Bintong Chen is currently Professor of Department of Management and Operations of Washington State University. He received his Ph.D. in operations management/research from the Wharton School, M.S. in systems engineering from the University of Pennsylvania, and dual B.S. degrees from Shanghai Jiao Tong University of China. His research interests include optimization techniques and applied modeling for logistic systems. He has published over 30 articles in high quality academic journals. He is well known for his pioneer work in non-interior approach for complementarity problems and his name is associated with the commonly used "Chen-Harker-Kanzow-Smale" function. His research work has generated over 400 citations according to SCI. He has taught many operations management and operations research related classes at undergraduate, MBA, and Ph.D. levels. In the recently years, he is experimenting project-based learning for the WSU online education program. Many projects from his class have been adopted and implemented by companies in the northwest region of the US and lead to significant process improvements and savings. In the College of Business of Washington State University, he was named the Don and Mary Ann Parachini Faculty Fellow in May 2006. He received the Outstanding Teaching Award in 2004 and 2007 and the Outstanding Scholarship/Research Award in 1998. At the university level, he received the Outstanding Advisor Award in 2007 and he was among the finalists for the Marian E. Smith Faculty Achievement Award in 2003. He was recently appointed the (oversea) dean of the School of Business Administration, Southwest University of Finance and Economics, China.

报告题目: Channel Analysis under Rebate Promotion

摘要: We consider a two level supply chain with a manufacturer and a retailer. The purpose of this research is to study the interplay between the manufacturer's consumer promotion and retailer's promotion as well as the associated consumer behavior. In particular, we consider the case where the manufacturer utilizes the mail-in rebate as a tool to enhance the customer demand. We assume that the consumers are risk averse, and the manufacturer further introduces the reference price to guide the retailer pricing for its product. We demonstrate how the manufacturer's promotion strategy and its profit change as the slippage rate of the rebate and the magnitude of the consumer's risk aversion vary.

陈方若教授： Fangruo Chen received a B.S. in Engineering from Shanghai Jiao Tong University in China in 1985. From the University of Pennsylvania, he received his M.S. in Systems Engineering in 1987, A.M. in Managerial Economics and Social Sciences in 1992, and Ph. D. in Operations Management in 1993 (from the Wharton School). Professor Chen's main research area is supply chain management, which includes production/distribution planning, inventory replenishment strategy, supplier management, information technology, etc. He has published numerous scholarly articles in journals such as *Management Science*, *Operations Research*, *Naval Research Logistics*, *European Journal of Operational Research*, *Production and Operations Management*, etc. He regularly teaches courses on Operations Management, Supply Chain Management, and Negotiations in the U.S. as well as in China, including executive training workshops on these topics. Professor Chen received the prestigious CAREER Award from the National Science Foundation (USA), 1997. In 2004, he received the Overseas Chinese Young Investigator Award from the National Natural Science Foundation of China. In 2005, he was appointed the Distinguished Visiting Professor by the Chinese Academy of Science. In 2006, he was named the Chang Jiang Scholar by the Ministry of Education, China. Professor Chen held, and continues to hold, numerous leadership positions in his profession: Area Editor for *Operations Research* (responsible for the Manufacturing, Service, and Supply Chain Operations area), Departmental Editor for *Management Science* (Supply Chain Management Department), Senior Editor for *Manufacturing & Service Operations Management*, and Editorial Board Member of *Marketing Science*. In 2006, he served as the President of the Manufacturing & Service Operations Management (MSOM) Society in the U.S.

报告题目： Recent developments in supply chain management

摘要： Supply chain management has been an active area of research in the field of operations management for the past decade or so. A defining feature of supply chain management is to recognize that the members of a supply chain may not share the same objective and may have access to different information. Therefore the issues of incentives, coordination, and competition come to the foreground. To study these issues, OM researchers have relied on theories developed in other disciplines such as marketing and economics (agency theory, game theory, contract theory, information economics, etc.). It is comforting to know that the field of supply chain management continues to expand into other neighboring disciplines, in an effort to bring our theoretical models closer to reality. The purpose of this presentation is to highlight some of the recent (and exciting) developments in supply chain management research.

卓训荣教授: Hsun-Jung Cho got his Ph.D. from University of Pennsylvania, USA in 1989. He is now Professor of Department of Transportation Technology & Management, Associate Dean of College of Management and Director of Modeling & Simulation Center at National Chiao-Tung University, Taiwan. His research areas include Logistics and Supply Chain, Intelligent Transportation Systems, Network Analysis, GIS-T and Decision Support System, Traffic Control and Simulations

报告题目: The Solution Methods of Stackelberg Game

摘要: The leader-follower Stackelberg game can be formulated as a generalized bi-level mathematical programming problem in which one of the levels is presented as a variational inequality problem. The upper level player (leader) knows the performance function (reaction function) of the lower level player (follower), but the lower level player does not know that of the upper level player, and his optimal course is to assume the role of follower. Since the inner-outer iterative techniques for Stackelberg type problems cannot be expected to converge to the solution. If we have reaction function of follower then it can be plug into the objective function of leader. But usually the functional form of reaction is not known. An approximation reaction function based on the sensitivity information for the decision maker can be developed. To obtain this information needed to implement the theory of sensitivity analysis for variational inequalities. Finally, numerical results demonstrate the effectiveness of the proposed algorithms.

谢金星教授: Dr. Jinxing Xie is currently a professor at the Department of Mathematical Sciences, Tsinghua University, Beijing, China. He received his BSc in Applied Mathematics in 1988 and his Ph.D. in Computational Mathematics in 1995, both from Tsinghua University. He has the experience of working at Shanghai Baoshan Steel Group as a production planning and scheduling engineer for two years (1998-1990). His research interests lie in the field of Logistics and Supply Chain Management, and Production Planning and Scheduling. He has published more than 20 papers in peer-reviewed international journals, including *Operations Research*, *Operations Research Letters*, *European Journal of Operations Research*, *Decision Sciences*, *Production and Operations Management*, and *Supply Chain Management: An International Journal*. He has received research funds from NSF of China, China 863 HighTech Plan, Siemens (China) Ltd, Xidan Shopping Group, and Wuhan Steel Group. He has served the editorial review team of *Decision Sciences* since 2005, and served as the associate editor for *International Journal of Applied Management Sciences* since 2007. He is an executive council member of the China Society for Industrial and Applied Math since 2004 and the International Community for Teachers of Mathematical Modeling and Applications since 2005.

报告题目: Coop advertising games in a manufacture-retailer supply chain

摘要: Cooperative (coop) advertising is a practice that the manufacturer pays the retailer a portion of the retailer's local advertising cost in order to increase retailer's sales volume, which plays a significant role in today's marketing programs and makes up the majority of promotional budgets for all the channel members. Nevertheless, most studies to date on coop advertising have focused on characterizing the equilibrium solutions for the leader-follower and partnership game models, and seldom dealt with the design of mechanisms which would lead to the channel coordination. Noticing that the conventional coop advertising program in which only the manufacturer shares a portion of the local advertising cost does not lead to the channel coordination, we propose an alternative bidirectional coop advertising program in which the retailer also shares a portion of the manufacturer's national advertising cost. We analyze and compare these two coop advertising programs under both situations where the participation rates are given exogenously and are determined endogenously. It reveals that with the participation rates for both parties being set properly, the bidirectional coop advertising program would lead to the channel coordination.

徐福缘教授： Dr.Xu Fuyuan is a professor and is now responsible both for the Management Science discipline of the doctor degree and for the post-doctor's scientific research center in University of Shanghai for Science and Technology (USST). He is also the director of Chinese Mechanical Engineering Society(CMES), the director of Systems Engineering Society of China(DESC), the standing director of Chinese Metallurgical Engineering Education Society, the chairman of Education System Engineering Committee of DESC, the vice chairman of Systems Engineering Education and Popularization Committee of DESC , the vice chairman of Systems Engineering Branch of Chinese Software Industry Association, the president of the Engineering Training Association for Higher Education in Shanghai, the IT member of the Urban Construction Committee in Shanghai, the standing director of Shanghai Urban Industry Association, the standing director of Shanghai Information Society, the director of International knowledge and Systems Science Society, the member of the editorial Committee of the Journal of Systems Engineering and the Journal of Systems Management. He mainly engages in research and teaching work in the fields of Industrial Engineering, System Engineering and Business Management. He undertook many important projects funded by National Natural Science Funds, National 863 High-Tech Planning and other provincial government level's foundation. He has gotten 8 times of the prizes awarded by the governments and has published more than 200 papers. He is honored as a National Level's Excellent Teacher, the Labor Model of Shanghai Municipality, the Outstanding Scientist of the Chinese Mechanical Industry and Shanghai Municipality, the Excellent Tutor for Doctor Level's Dissertation in Shanghai and so on.

报告题目： Introduction of Some Research Work on SDN

摘要： Nowadays, enterprises are facing the circumstances of economy globalization and the consumer-demand diversification, which claims more product diversities, shorter product lifecycle, faster consignment, lower product cost and higher product quality and so on. This environment needs enterprises to have better open-minded operation manner and the corresponding management model. However, many of the Chinese enterprises are not suited for these changes and the situation is serious in a sense. Therefore, first, the challenges being encountered by Chinese enterprises and the limitations of current enterprise management models are analyzed. Then, the conception, connotation and characteristics of the SDN (namely Supply and Demand Network with multifunction and opening characteristics for enterprises) model are proposed .The main similarities and differences comparing with other models are discussed. Afterwards, the cause analysis for the management model evolution towards the SDN by using system methods are given out. Finally, some main results of recent research work on SDN are introduced.

徐以汎教授: Dr. XU, Yifan obtain his Ph.D degree from Institute of Applied Mathematics, Chinese Academy of Science in 1998. After finishing his Post doctor program in Institute of Automate, CAS, he joined Fudan University in 1999. Now, he is the professor and chairman of Department of Management Science, School of Management, Fudan University. His research interesting is service management, revenue management, optimization and its application.

报告题目: Dynamic Production and Pricing Control for a Make-to-Stock Manufacturing Site with Average Profit Criterion

摘要: This paper concerns with a joint management problem of finished goods inventory in a make-to-stock manufacturing system in the long-run average profit criterion. In the system, the production rate is random with controllable mean rate and demand is Markovian with changeable mean rate which depends on the sale price. The management issue is how to dynamically adjust the production rate and the sale price to maximize the long-run average profit. We discover that the optimal policy of dynamic pricing and production control over an infinite horizon is of thresholds. An effective algorithm is suggested by a steep discussion on a series of the bounded storage optimization problems.

张汉勤教授: Hanqin Zhang is a full professor in Operations Research Division, Institute of Applied Mathematics, Academy of Mathematics and Systems Science, the Chinese Academy of Sciences, Beijing, China; the Co-Director of the Center for Decisions Under Uncertainty. He received his Ph.D in operations research from the Chinese Academy of Sciences in 1991. Hanqin Zhang's research interests are in queueing networks, stochastic manufacturing systems, inventory models and supply chain management. He has published more than 60 papers in refereed journals such as *Operations Research*, *Manufacturing & Service Operations Management*, *Mathematics of Operations Research*, *SIAM Journal on Applied Mathematics*, *Queueing Systems*, and *Annals of Applied Probability*. He is a co-author of two monographs, *Average-Cost Control of Stochastic Manufacturing Systems* (with S. Sethi and Q. Zhang, Springer-Verlag, 2004), and *Inventory and Supply Chain Management with Forecast Updates* (with S. Sethi and H. Yan, Springer-Verlag, 2005). He co-edited a research volume: *Stochastic Modeling and Optimization* (with David Yao and Xun-Yu Zhou, Springer-Verlag, 2003), and was a guest editor for *Annals of Operations Research*, Volume 135 (2005). He is/was on editorial board of *Acta Mathematicae Applicatae Sinica* (Chinese Edition and English Edition), *Asia-Pacific Journal of Operational Research*, *European Journal of Operational Research*, *IEEE Transactions on Automatic Control*, *Journal of Systems Science and Complexity*, *Journal of Systems Science and Mathematics*, *Mathematical Methods of Operations Research*, and *TOP*. Hanqin Zhang has received numerous awards for recognizing his research achievements including Distinguished Young Investigator Grant from the National Natural Sciences Foundation of China, and the Hundred Talents Grant from the Chinese Academy of Sciences.

报告题目: The Effect of Leadtime and Demand Uncertainties (r, q) Inventory Systems

摘要: We study a single-item continuous-review (r, q) inventory system, where r is the reorder point and q is the order quantity. The demand is a compound Poisson process. We investigate the behavior of the optimal policy parameters and long-run average cost of the system in response to stochastically longer or more variable leadtimes. We show that while some of the properties of the base-stock system can be extended to this more general model, some do not. (Joint with Jing-Sheng Song at the Fuqua School of Business, Duke University, Durham, NC 27708, USA, Yumei Hou at Yanshan University, Hebei Province, and Mingzheng Wang Dalian University of Technology, Dalian, 116024, China)