

**1 - Queuing network analysis of a distribution center***Liqliang Liu, Ivo Adan**Paper added to session***2 - A facility design approach to improve revenue management of public storage warehouses***Yeming Gong, Versijdenstraat 6, 3033TK, Rotterdam, 3033tk, Rotterdam, Netherlands, gongyeming@hotmail.com, René de Koster*

Inspired by communication with the largest public storage warehouse company Shurgard-Public Storage and matured during our visits to 53 warehouses in America, Europe, and Asia, this paper proposes a new facility design to improve revenue management. Our experiments show new facility design can significantly improve the expected revenue of public storage warehouses. This is the first to apply revenue management theory as a methodological foundation to facility design.

**3 - The order-picking problem in a rectangular warehouse with turn costs***Melih Çelik, Haldun Sural***4 - Modeling goals and deadlines for enhancing worker performance***José Antonio Larco, Kees Jan Roodbergen, René de Koster, Jan Dul***■ WA-32****1 - The stable distributions, their parameter estimation, and financial application***Vadym Omelchenko***2 - Asymptotic expansions for the first four moments of the sparre anderson surplus process***Rovshen Aliyev, Vafa Jafarova***3 - The non-monotonic effect of financing constraints on investment***Stefan Hirth, Marc Viswanatha**Paper moved to session MA-41***Modeling uncertainties for the magnitude of droughts and biological processes***Laureano Fernando Escudero, Eva-Maria Ortega***■ WA-38****1 - Robust simulation-optimization through taguchi's approach and metamodels***Gabriella Dellino, Jack Kleijnen, Carlo Meloni***2 - Multicriteria optimization for the performance of solid roket motor***Elcin Kartal, Inci Batmaz, Gulser Koksall***3 - Constrained optimization in simulation using kriging metamodeling***Inneke Van Nieuwenhuysse, Jack Kleijnen, Wim van Beers**Paper added to session***4 - Forecast of possible forest fires in turkey by simulation method***Ceren Erdin Gündogdu, Yıldız Teknik Uni. IIBF Isletme Bölümü, Barbaros Bulvarı, Besiktas, 34330, Istanbul, Turkey, ceren\_erdin@yahoo.com*

Forest fires have an important role in the global warming. It is a well-known fact that nearly 30% of carbon dioxide released to the atmosphere is caused by the forest fires throughout the world. In this research, forecasts with regard to the forest fires to occur in future will be carried out by simulation method, considering the reasons of starting the forest fires in our country, its numeric distribution by the regions, dimensions and the other factors. A suitable environment will be prepared for the forest operators to decide in planning the necessary actions in line with the results obtained.

**■ WC-27****1 - Shared stacking policy for stacking export containers at container yards***Amir Hossein Gharehgozli, Yugang Yu, René de Koster, Jan Tijmen Udding**Paper added to session***2 - Online disruption management of container terminal operations***Jan Tijmen Udding, Department of Mechanical Engineering, Eindhoven University of Technology, Den Dolech 2, P.O.Box 513, 5600 MB, Eindhoven, Netherlands, J.T.Udding@tue.nl, Maarten Hendriks, Maarten Vullings, Erjen Lefeber*

We consider a container terminal operator that services a number of periodically calling vessels. However, vessels may arrive earlier or later than scheduled, call sizes may change and quay cranes may break down. The operator faces the problem of reacting on these disturbances. We propose a rolling horizon approach that takes forecasts on vessel arrivals and load compositions, and crane breakdowns into account for making the current operational decisions: the berth allocation, and the crane allocation. Results show that taking the forecasts into account yields significant cost reductions.

**3 - Improving warehouse performance by choosing proper storage and order picking systems***Manolo Mizzi, René de Koster***4 - Managing warehouse empty storage space***René de Koster, Yugang Yu***■ WC-31****1 - A question of profit***Hsin-Vonn Seow, Lai-Soon Lee***2 - Do novel algorithms pay off? a benchmark of data mining algorithms in management applications***Stefan Lessmann, Stefan Voss**Cancellation***Applying metacost to ensemble learners***Sebastian Schueller, Stefan Lessmann***4 - Maximum tolerance and maximum greatest tolerance of strict separating systems***Xavier Molinero, Josep Freixas***■ WC-38****1 - Pricing and hedging asian basket spread options***Michèle Vanmaele, Griselda Deelstra, Alexandre Petkovic***2 - A stochastic approach to the valuation of barrier options in heston's stochastic volatility model***Susanne Griebisch, Kay Frederik Pilz***3 - A robust regression Monte Carlo method for pricing high-dimensional american-style options***Christian Jonen**Paper added to session***4 - Dynamic limit order books in financial markets with liquidity risk***Jocelyne Bion-Nadal, Ecole Polytechnique, 91128, Palaiseau, France, bionnada@cmappx.polytechnique.fr*

We introduce in a model free setting an axiomatic approach of Time Consistent Pricing Procedure (TCPP) to assign to any financial position a dynamic limit order book. Arbitrage free and time consistency imply the existence of an equivalent probability measure  $R$  such that the ask price process associated with any financial instrument is a  $R$ -supermartingale admitting a cadlag version. The axiomatic of TCPP allows for the construction of dynamic pricing procedures extending the dynamics of reference assets and calibrated on the observed limit order books for a reference family of options.

**■ WD-17**