Benjamin LEGROS

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Académie : Digitalisation

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Intérêts de recherche

Management des Opérations, Recherche Opérationnelle

Formation

2024	Habilitation à Diriger des Recherches, Management des Opérations, CentraleSupelec, France
2013	Doctorat en génie industriel, CentraleSupelec, France
2006	Ecole d'ingénieur, Mathématiques, Ecole Centrale Paris, France

Expérience Professionnelle

Positions académiques principales

Depuis 2024	Professeur, SKEMA Business School, France

Autres affiliations académiques

2017 - 2024	Professeur, EM Normandie Business School, France
2010 - 2017	Responsable de chaire, CentraleSupelec, France

Publications

Articles académiques revus

LEGROS, B. et VAN LEEUWAARDEN, J. (2026). Waiting Time Externality Awareness in Socially Responsible Queueing. *Production and Operations Management*, 35(10), pp. 3750 - 3769.

LEGROS, B., DE VÉRICOURT, F., VAN LEEUWAARDEN, J. et FRANSOO, J. (2026). When More Capacity Creates More Congestion: The Role of Risk Aversion. *Production and Operations Management*, 35(11), pp. 4096 - 4110.

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LEGROS, B., VAN LEEUWAARDEN, J.S. et FRANSOO, J.C. (2025). Managing Reusable Resources With Usage Time Limits. *Production and Operations Management*, 34(8), pp. 2413–2429.

ALSAMADI , S., MARTINEZ, C., PEHLIVAN , C., CELLIER , N., JOUINI, O., LEGROS, B. ... FONTANILI, F. (2025). Machine learning-based agent staffing under uncertainty: The case of a relay call center. *Expert Systems with Applications*, 281(1), pp. 127385.

DUPRÉ, A., JOUINI, O., LAMÉ, G., XIE, X., JEMAI, Z., LEGROS, B. ... BOTREL, T. (2025). Machine learning-enhanced prediction of operating room occupation time and length of stay: a retrospective cohort study on emergency surgery care pathways. *Journal of Clinical Monitoring and Computing*, 39, pp. 1215–1225.

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LEGROS, B. (2022). The principal-agent problem for service rate event-dependency. *European Journal of Operational Research*, 297(3), pp. 949-963.

JOUINI, O., BENJAAFAR, S., LU, B., LI, S. et LEGROS, B. (2022). Appointment-driven queueing systems with non-punctual customers. *Queuing Systems*, 101(1-2), pp. 1-56.

LEGROS, B. (2021). Routing analyses for call centers with human and automated services. *International Journal of Production Economics*, 240, pp. 108247.

LEGROS, B. (2021). Agents' SelfRouting for Blended Operations to Balance Inbound and Outbound Services. *Production and Operations Management*, 30(10), pp. 3599-3614.

LEGROS, B. (2021). Age-based Markovian approximation of the G/M/1 queue. *Operations Research Letters*, 49(5), pp. 708-714.

ABHISHEK,, LEGROS, B. et FRANSOO, J.C. (2021). Performance Evaluation of Stochastic Systems with Dedicated Delivery Bays and General On-Street Parking. *Transportation Science*, 55(5), pp. 1070-1087.

LEGROS, B., JOUINI, O. et KOOLE, G. (2021). Should We Wait Before Outsourcing? Analysis of a Revenue-Generating Blended Contact Center. *Manufacturing and Service Operations Management*, 23(5), pp. 1118-1138.

LEGROS, B. (2021). Transient analysis of an affine Queue-Hawkes process. *Operations Research Letters*, 49(3), pp. 393-399.

LEGROS, B. (2021). Dimensioning a queue with state-dependent arrival rates. *Computers & Operations Research*, 128, pp. 105179.

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LEGROS, B., JOUINI, O., AKŞIN, O.Z. et KOOLE, G. (2020). Front-office multitasking between service encounters and back-office tasks. *European Journal of Operational Research*, 287(3), pp. 946-963.

LEGROS, B. (2020). Late-rejection, a strategy to perform an overflow policy. *European Journal of Operational Research*, 281(1), pp. 66-76.

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LEGROS, B., BOUCHERY, Y. et FRANSOO, J. (2019). A TimeBased Policy for Empty Container Management by Consignees. *Production and Operations Management*, 28(6), pp. 1503-1527.

LEGROS, B. et JOUINI, O. (2019). On the scheduling of operations in a chat contact center. *European Journal of Operational Research*, 274(1), pp. 303-316.

LEGROS, B. (2019). Dynamic repositioning strategy in a bike-sharing system; how to prioritize and how to rebalance a bike station. *European Journal of Operational Research*, 272(2), pp. 740-753.

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LEGROS, B. (2018). Waiting time based routing policies to parallel queues with percentiles objectives. *Operations Research Letters*, 46(3), pp. 356-361.

LEGROS, B., JOUINI, O. et KOOLE, G. (2018). Blended call center with idling times during the call service. *IIE Transactions (Institute of Industrial Engineering)*, 50(4), pp. 279-297.

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LEGROS, B., JOUINI, O. et KOOLE, G. (2018). A Uniformization Approach for the Dynamic Control of Queueing Systems with Abandonments. *Operations Research*, 66(1), pp. 200-209.

LEGROS, B. (2017). Reservation, a tool to reduce the balking effect and the probability of delay. *Operations Research Letters*, 45(6), pp. 592-597.

LEGROS, B., DING, S., VAN DER MEI, R. et JOUINI, O. (2017). Call centers with a postponed callback offer. *OR Spectrum*, 39(4), pp. 1097-1125.

LEGROS, B. et JOUINI, O. (2017). Routing in a queueing system with two heterogeneous servers in speed and in quality of resolution. *Stochastic Models*, 33(3), pp. 392-410.

LEGROS, B. (2016). Unintended consequences of optimizing a queue discipline for a service level defined by a percentile of the waiting time. *Operations Research Letters*, 44(6), pp. 839-845.

LEGROS, B., JOUINI, O. et KOOLE, G. (2016). Optimal scheduling in call centers with a callback option. *International Journal of Accounting, Auditing and Performance Evaluation*, 95, pp. 1-40.

LEGROS, B. et JOUINI, O. (2015). A linear algebraic approach for the computation of sums of Erlang random variables. *Applied Mathematical Modelling*, 39(16), pp. 4971-4977.

LEGROS, B., JOUINI, O. et KOOLE, G. (2015). Adaptive threshold policies for multi-channel call centers. *IIE Transactions*, 47(4), pp. 414-430.

LEGROS, B., JOUINI, O. et DALLERY, Y. (2015). A flexible architecture for call centers with skill-based routing. *International Journal of Production Economics*, 159, pp. 192-207.

Autres activités de recherche