

Benjamin LEGROS

Professeur

Académie : Digitalisation

Centre de recherche : SKEMA Centre for Analytics and Management Science

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Intérêts de recherche

Management des Opérations, Recherche Opérationnelle

Domaines d'enseignement

Management des Opérations, Recherche Opérationnelle

Formation

2024	Habilitation à Diriger des Recherches, Management des Opérations, CentraleSupélec, France
2013	Doctorat en génie industriel, CentraleSupélec, 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, CentraleSupélec, France

Publications

Articles académiques revus

BENJAUFAR, S., JOUINI, O., LEGROS, B. et LU, B. (2025). Pooled Testing in the Presence of Congestion. *Operations Research Letters*, 58(107208).

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

LEGROS, B. et FRANSOO, J.C. (2024). Admission and pricing optimization of on-street parking with delivery bays. *European Journal of Operational Research*, 312(1), pp. 138-149.

LEGROS, B. (2024). How should rejection be used to maximize congestion while preserving idle time? *Journal of the Operational Research Society*.

LEGROS, B. (2023). Dynamic policy for idling time preservation. *Naval Research Logistics*, 70(1), pp. 53-71.

LEGROS, B. (2022). The transient blended queue. *Operations Research Letters*, 50(3), pp. 287-294.

- 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. *Queueing 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.
- KOUKI, C., LEGROS, B., ZIED BABAI, M. et JOUINI, O. (2020). Analysis of base-stock perishable inventory systems with general lifetime and lead-time. *European Journal of Operational Research*, 287(3), pp. 901-915.
- LEGROS, B., JOUINI, O., AKIN, 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.
- LEGROS, B. (2019). Transient analysis of a Markovian queue with deterministic rejection. *Operations Research Letters*, 47(5), pp. 391-397.
- 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.
- LEGROS, B. (2018). M/G/1 queue with event-dependent arrival rates. *Queueing Systems*, 89(3-4), pp. 269-301.
- 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.
- LEGROS, B. et SEZER, A.D. (2018). Stationary analysis of a single queue with remaining service time-dependent arrivals. *Queueing Systems*, 88(1-2), pp. 139-165.
- 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
