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P R O B L È M E S

P 54, R 1. La réponse est négative (1).

I. 2, p. 332.

(1) R. J. Knill, *Cones, products and fixed points*, Fundamenta Mathematicae 60 (1967), p. 35-46.

P 554, R 2. La réponse signalée dans R 1 se trouve déjà publiée (2).

XV. 1, p. 160, et XIX. 1, p. 180.

(2) J. L. Cornette, *Retracts of the pseudo-arc*, ce fascicule, p. 235-239.

P 570, R 1. La réponse est négative (3).

XVI. p. 228.

(3) J.-P. Kahane, *Sur les ensembles ultrakroneckeriens*, ce fascicule, p. 261-263.

P 591, R 1. La réponse est négative comme l'a montré J. S. Lipiński par un exemple très simple (4).

XVII. 1, p. 164.

(4) Lettre du 13. 9. 1967.

P 594, R 1. La réponse est affirmative (5).

XVII. 2, p. 193.

(5) D. Rotenberg, à paraitre dans Colloquium Mathematicum.

P 615, R 1. F. Burton Jones a signalée la réponse affirmative en donnant une esquisse de démonstration [6].

XVII. 2, p. 368.

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[6] F. Burton Jones, *On the plane ono-to-one map of a line*, ce fascicule, p. 231 - 233.

J. S. LIPIŃSKI (ŁÓDŹ)

P 639. Formulé dans la communication *Une remarque sur la continuité et la connexité.*

Ce fascicule, p. 252.

JEAN-PIERRE KAHANE (ORSAY)

P 640. Formulé dans la communication *Sur les ensembles ultrakroneckeriens.*

Ce fascicule, p. 262.

TOGO NISHIURA (DETROIT, MICH.)

P 641 et **642.** Formulés dans la communication *Completions of normed linear lattices.*

Ce fascicule, p. 272 et 274.

M. KRATKO (NOVOSIBIRSK)

P 643. Can every finite lattice be obtained as the lattice of all congruences of a suitable finite algebra $\mathfrak{A} = \langle A, f_1(x), \ldots, f_n(x)\rangle$ with unary fundamental operations?

New Scottish Book, Probl. 789, 6. X. 1967.

S. FAJTLOWICZ (WROCŁAW)

P 644. An equationally definable class of algebras is called *equationally complete* if the set of equations fulfilled in this class is maximal consistent. Does an equationally complete class have the amalgamation property? Or, at least, does any algebra of such a class have the EIS-property [7]?

New Scottish Book, Probl. 791, 8. X. 1967.

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[7] For definitions see e.g. J. Płonka, *Exchange of independent sets in abstract algebras III*, Colloquium Mathematicum 15 (1966), p. 173-180; especially p. 173 and p. 180.

K. JACOBS (ERLANGEN)

P 645. Let Ω be a compact metric space and T an automorphism, and let m be a weakly almost periodic measure $\big($i.e. $\big(\int fT^t dm\big)_{t\in Z}$ is almost periodic for $f\in C(\Omega)\big)$. Is it generally true that

$$\lim_{n\to\infty}\frac{1}{n}\sum_{n=0}^{n-1} fT^n$$

exists m-almost everywhere for any $f\in C(\Omega)$?

For product measure m in shift space Ω it is true by Kolmogorov's law of large numbers, and it is false for some bounded measurable but not continuous functions f.

New Scottish Book, Probl. 798, 13. X. 1967.