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Abstract. lorem ipsum

***Keywords**:* keyword-1, keyword-2, keyword-3, keyword-4, etc.
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1. INTRODUCTION

The paper deals with ..... [4–6]. As any dedicated reader [12] can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

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2. SECOND SECTION

For the inpainting problem we use the following Fokker-Planck equation:

$$\begin{aligned} &\frac{\partial u}{\partial t} - \sum_{i,j=1}^{2} \frac{\partial^2}{\partial x_i \partial x_j}\big(a_{ij}(x,u)u\big) + \operatorname{div}\big(b(x,u)u\big) = 0 \quad \text{for } x \in \mathbb{R}^2\ ,\ t > 0 \\ &u(0,x) = u_0(x) \quad x \in \mathbb{R}^2 \end{aligned} \tag{1}$$

where $b(x,u) = (b_1(x,u), b_2(x,u))$.

Definition 1. The family of polynomials $\{Q_n^{(X)}(x,t), n \geq 0, t \geq 0\}$ satisfying ...

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As regards existence for equation (1) we note the following result established in [13].

THEOREM 1. *Assume hypotheses (i)-(iii) are true. Then, for each $u_0 \in L^1(\mathbb{R}^2)$, there exists a unique solution $u = u(\cdot, u_0) \in C([0,\infty); L^1(\mathbb{R}^2))$ to equation (1).*

Proof. lorem ipsum lorem ipsum lorem ipsum lorem ipsum lorem ipsum □

2.1. Subsection

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$$S = 1 + \cfrac{1}{1 + \cfrac{1}{1 + \cfrac{1}{1 + \ldots}}} \tag{2}$$

$$S = 1 + \frac{1}{S} \tag{3}$$

$$S^2 - S = 0 \tag{4}$$

$$S(S-1) = 0 \tag{5}$$

PROPOSITION 1. *It holds*

$$\begin{aligned} Q_n^{(X_{t+s})}(x,t+s) &= \sum_{k=0}^{n} \binom{n}{k} Q_k^{(X_s)}(0,s) Q_{n-k}^{(X_t)}(x,t) \\ &= \sum_{k=0}^{n} \binom{n}{k} Q_k^{(X_t)}(0,t) Q_{n-k}^{(X_s)}(x,s). \end{aligned}$$

Proof. Since Lévy processes have independent increments then

$$X_{t+s} = X_{t+s} - X_s + X_s \overset{(d)}{=} \hat{X}_t + X_s,$$

where $\hat{X}_t$ is identically distributed with X_t. So the claim follows from ... □

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Remark 1. lorem ipsum lorem ipsum lorem ipsum lorem ipsum lorem ipsum

3. THIRD SECTION

The existence of the weak solution to equation (1) guarantees that the discrete solution of the numerically approximated problem converges to this solution.

Fig. 1 – Siriu Lake, Romania[1].

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[1] https://upload.wikimedia.org/wikipedia/commons/thumb/7/70/Siriu_Lake.jpg/1920px-Siriu_Lake.jpg

Table 1

Error results for xxxxx -

	L^1-error			PSNR		
	Im1	Im2	Im3	Im1	Im2	Im3
Horizontal	74.9608	91.2995	74.502	43.4653	43.7074	46.7556
Vertical	65.0824	107.3804	77.8157	44.5495	42.4596	46.6387
45°	56.4275	104.2353	72.7608	46.5424	42.8236	47.3217
-45°	59.5137	102.1765	71.5804	46.064	42.4068	46.961

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Examples: as shown by Brown [4, 5]; as mentioned earlier [2, 4-–7, 9]; Smith [4] and Brown and Jones [5]; Wood et al. [7].

Examples of references within a reference: [3, Th. 1]; [3, Lemma 2]; [3, pp. 5–10]; [3, eq. (2)]; [3, Fig. 1]; [3, Appendix I]; [3, Sec. 4.5]; [3, Ch. 2, pp. 5–10]; [3, Algorithm 5].

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