Correction

"A Fast Parallel Algorithm for the Poisson Equation on a Disk," *J. Comp. Phys.*, 169, pp. 151–192, 2001.

The following typos in the reprint of the above paper should be corrected.

1. In step 5 of the Algorithm 3.1 on page 157 of the article, the formula for $v_0(r_l)$ for $l = 1$ should not have the term $\log r_l$. The correct form of the step 5 is as follows:

   Combine coefficients v_n^+ and v_n^- as defined in (15) and (17):

   For $l = 1, \ldots, M$

   $$v_0(r_l) = \begin{cases} v_0^-(r_l) + v_0^+(r_l); \text{ if } l = 1; \\ \log r_l \; v_0^-(r_l) + v_0^+(r_l); \text{ if } l \neq 1 \end{cases}$$

   $$v_n(r_l) = \overline{v_{-n}(r_l)} = v_n^-(r_l) + \overline{v_{-n}^+(r_l)}, \qquad n \in [-N/2, -1]$$

2. In step 6 of the Algorithm 3.1 on page 157 of the article, "For $l = 2, \ldots, M$" should be corrected as "For $l = 1, \ldots, M$". Note that l now starts from 1.

3. Equation (20) for the computation of $C_n^{i,i+1}$ using the trapezoidal rule on page 158 should be changed to the following:

   $$C_n^{i,i+1} = \frac{(\delta r)^2}{4n}\Big((i-1)\left(\frac{i-1}{i}\right)^{-n} f_n(r_i) + i f_n(r_{i+1})\Big)$$

   where $r_i = (i-1)\delta r$.

   In addition, equation (21) for the computation of $C_n^{i-1,i+1}$ using the Simpson's rule on the same page should also be changed to the following:

   $$C_n^{i-1,i+1} = \frac{\delta^2}{6n}\Big((i-2)\Big(\frac{i-2}{i}\Big)^{-n} f_n(r_{i-1}) + 4(i-1)\Big(\frac{i-1}{i}\Big)^{-n} f_n(r_i) + i f_n(r_{i+1})\Big).$$

4. The inequality for $|I_\varepsilon|$ on page 187 has several mistakes and should be changed to the following,

   $$\begin{aligned} |I_\varepsilon| &\leq \sup_{\eta \in_{r-\varepsilon}\Omega^*_{r+\varepsilon}} |f(\eta)| \sup_{\eta \in_{r-\varepsilon}\Omega^*_{r+\varepsilon}} |\log|x-\eta|| \pi((r+\varepsilon)^2 - (r-\varepsilon)^2) \\ &\leq \sup_{\eta \in_{r-\varepsilon}\Omega^*_{r+\varepsilon}} |f(\eta)| 4\pi\varepsilon \log \varepsilon. \end{aligned}$$

5. For the last equation on page 189 and the first equation on page 190, change "$\overline{v_n^+(r_l)}$" to "$\overline{v_{-n}^+(r_l)}$".