

Popravki članka A COMPACT RADIO TELESCOPE FOR THE 21CM NEUTRAL-HYDROGEN LINE dne 03.09.2017, Tadeja saje, Matjaž Vidmar

(1) splošno: enačb v besedilu ne smemo deliti!

(2) stran 116, levi stolpec, 2.odstavek, 2.vrstica, manjka presledek:
...using a corrugated horn or a corrugated flange...
pravilno bi bilo:
...using a corrugated horn or a corrugated flange...

(3) stran 116, slika 4 je na napačnem mestu prezgodaj v besedilu, bi se morala nahajati dva odstavka kasneje za besedilom:
...for the lowest system noise temperature T_S :
oziroma, če se slike res ne da prestaviti, popraviti stavek v:
...for the lowest system noise temperature T_S as shown on Figure 4.

(4) stran 118, desni stolpec, 2.odstavek, 2.vrstica, napaka v enačbi:
...with a noise temperature in the $T_{RX} \approx 290\text{K}$ (room temperature) range.
pravilno bi bilo:
...with a noise temperature in the $T_{RX} \approx 290\text{K}$ (room temperature) range.

(5) stran 118, desni stolpec, 3.odstavek, 6.vrstica, manjka eksponent 5:
For example, a good radio-frequency spectrum analyzer has a noise figure in the $F_{SA} \approx 25\text{dB}$ range corresponding to a noise temperature of about $T_{SA} \approx 10\text{K}$.
pravilno bi bilo:
For example, a good radio-frequency spectrum analyzer has a noise figure in the $F_{SA} \approx 25\text{dB}$ range corresponding to a noise temperature of about $T_{SA} \approx 10^5\text{K}$.

(6) stran 119, levi stolpec, 2.odstavek, 11.vrstica, podvojena beseda "the":
Considering the the filtering requirements of the radio telescope, two separate but almost identical...
pravilno bi bilo:
Considering the filtering requirements of the radio telescope, two separate but almost identical...

(7) stran 119, levi stolpec, 3.odstavek, 5.vrstica, manjka merska enota "mm":
...of rectangular cross-section of 40mmX60 and 2.5mm thick walls.
pravilno bi bilo:
...of rectangular cross-section of 40mmX60mm and 2.5mm thick walls.

(8) stran 120, desni stolpec, 3.odstavek, 2.vrstica, napačna beseda "must":

The supporting must of the antenna...

pravilno bi bilo:

The supporting mast of the antenna...

(9) stran 121, levi stolpec, 2.odstavek, 2.vrstica, napačna oznaka v enačbi:

...Boltzmann constant $k \approx 1.38 \cdot 10^{-23} \text{ J/K}$ cancel out in the hot/cold ratio.

pravilno bi bilo:

...Boltzmann constant $k_B \approx 1.38 \cdot 10^{-23} \text{ J/K}$ cancel out in the hot/cold ratio.

(10) stran 121, levi stolpec, 5.odstavek, 2.vrstica, manjka pomišljaj:

Yet another important parameter to check is the antenna aperture illumination efficiency.

pravilno bi bilo:

Yet another important parameter to check is the antenna aperture-illumination efficiency.

(11) stran 121, desni stolpec, 3.odstavek, 4.vrstica:

This data is regularly published on the internet like [8].

mišljena je referenca [8]

(12) stran 122, desni stolpec, manjkata znak povprečno in en enačaj v enačbi (7):

$$\frac{\Delta P}{P} = \frac{1}{\sqrt{N}} = \frac{1}{\sqrt{B \cdot \tau}} \sqrt{\frac{B_{VIDEO}}{B}} = \frac{\Delta T}{\langle T \rangle}$$

pravilno bi bilo:

$$\frac{\Delta P}{\langle P \rangle} = \frac{1}{\sqrt{N}} = \frac{1}{\sqrt{B \cdot \tau}} = \sqrt{\frac{B_{VIDEO}}{B}} = \frac{\Delta T}{\langle T \rangle}$$

(13) stran 123, levi stolpec, 2.odstavek, 9.vrstica, slabo viden znak za koren v enačbi:

$$\Delta T = \langle T \rangle / \sqrt{N} = 2.2\text{K}$$

(14) stran 124, levi stolpec, v enačbi (9) je narobe napisan naravni logaritem 2:

$$\eta_H = \frac{8 \pi \cdot k_B \cdot \tau_{1/2}}{h \cdot c_0 \cdot \lambda \cdot \ln 2} \cdot \int_{f_{MIN}}^{f_{MAX}} T(f) df$$

pravilno bi bilo:

$$\eta_H = \frac{8 \pi \cdot k_B \cdot \tau_{1/2}}{h \cdot c_0 \cdot \lambda \cdot \ln 2} \cdot \int_{f_{MIN}}^{f_{MAX}} T(f) df$$

(15) stran 124, levi stolpec, 2.odstavek, 3.vrstica, manjka eksponent 8 za svetlobno hitrost:

...the speed of light $c_0 \approx 3 \cdot 10^8 \text{ m/s}$,

pravilno bi bilo:

...the speed of light $c_0 \approx 3 \cdot 10^8 \text{ m/s}$,

(16) stran 124, levi stolpec, enačba (10), merske enote naj ne bi bile kurziv:

$$\eta_H = 1.82 \cdot 10^{18} \cdot \frac{\text{atoms}}{\text{cm}^2} \cdot \int_{v_{MIN}}^{v_{MAX}} \frac{T(v)}{K} \cdot \frac{dv}{\text{km/s}}$$

pravilno bi bilo:

$$\eta_H = 1.82 \cdot 10^{18} \cdot \frac{\text{atoms}}{\text{cm}^2} \cdot \int_{v_{MIN}}^{v_{MAX}} \frac{T(v)}{K} \cdot \frac{dv}{\text{km/s}}$$

(17) stran 125, levi stolpec, 3.odstavek, 7.vrstica, slabo viden znak za koren v enačbi:

...fluctuations to approximately $10\text{dB}/\sqrt{2048 \cdot 13} \approx 0.06\text{dB}$.

(18) stran 126, desni stolpec, 1.odstavek, 1.vrstica, napačna grška črka "delta":

Sagittarius A has a declination of about $6'' - 29^\circ$, ...

pravilno bi bilo:

Sagittarius A has a declination of about $\delta \approx -29^\circ$, ...

(19) stran 126, desni stolpec, 3.odstavek 1.vrstica, napačna številka slike:

Figure 21 shows unprocessed and uncorrected data.

pravilno bi bilo:

Figure 23 shows unprocessed and uncorrected data.

(20) stran 127, lepo prosim za večje merilo slike 24, saj v takšnem formatu napisi niso vidni!

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