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TITLE A LATTICE WITH NO TRANSITION AND LARGE DYNAMIC APERTURE

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1. Summary

2. Concepts for the arc linear optics

In order to reduce the number of dimensions, it seems appropriate to refer to the idea of "canceling the dispersion in the straight sections" by having an integer number of oscillations in each cell, rather than adding dispersion suppressors at every π extremity. This can be achieved with quadrupoles (bipole magnets) in the curved sections, fitted with triplet magnets. It is, however, necessary to group the triplet cells and organize the quadrupole strengths in such a way that a dispersion perturbation had a negligible impact on the beam alignment within the group. Moreover, each arc should contain an equal number of triplet groups, so as to ensure that the perturbation nature is identical in the left and right halves of the ring, thus helping to reduce the perturbation on the horizontal dispersion. In the present design, the number of triplet groups is 12 in each half of the ring, with 4 groups per sector. The quadrupoles are grouped in pairs, with 2 groups per sector, and 4 groups per half of the ring. The quadrupoles are grouped in pairs, with 2 groups per sector, and 4 groups per half of the ring. The quadrupoles are grouped in pairs, with 2 groups per sector, and 4 groups per half of the ring.

All the conditions described above can be expressed mathematically. Each arc is supposed to be made of N groups of k cells, the k cells being organized such as to achieve an imaginary transition energy or a negative integral of the dispersion. The nonlinear kinks due to sextupoles are then supposed to spread over a phase separation corresponding to n groups of k cells. The average phase advances per cell inside one group are noted $\Delta\phi_x$ and $\Delta\phi_y$, while the minimum and maximum β -values which appear in the quadrupoles and will likely be almost equal to the values in the sextupoles are noted β_x , β_y and β_{x_0} , β_{y_0} . The conditions for nonlinear kink excitation and sextupole decoupling imply that the minima be much smaller than the maxima and that all maxima be approximately the same. With these notations, the requirements mentioned can be written as follows:

$$y = k \cdot \Delta u, \quad u = 0 \cdot 1 \text{ m}$$

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

... ..

1. 2. 3. 4.

... ..

The first condition is that the author should be a professional in the two planes and a true expert in the subject. In fact, I would not even consider the author of a book on psychology and medicine as a professional if he is not a physician and psychologist, respectively. The first and second conditions are that the author should be a professional in the two planes and a true expert in the subject. In fact, I would not even consider the author of a book on psychology and medicine as a professional if he is not a physician and psychologist, respectively.

[illegible]

1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.

[illegible]

 