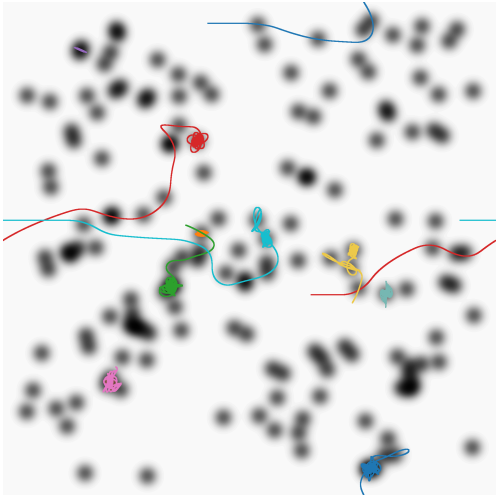
Национальный исследовательский ядерный университет «МИФИ»,
Институт нанотехнологий в электронике, спинтронике и фотонике

Квантовое моделирование транспорта квазидвумерных электронов в слое наноструктур

Ю.Д. Сибирмовский, *к.ф.-м.н., доцент*
соавторы: ...

18 ноября 2023 г.

Введение



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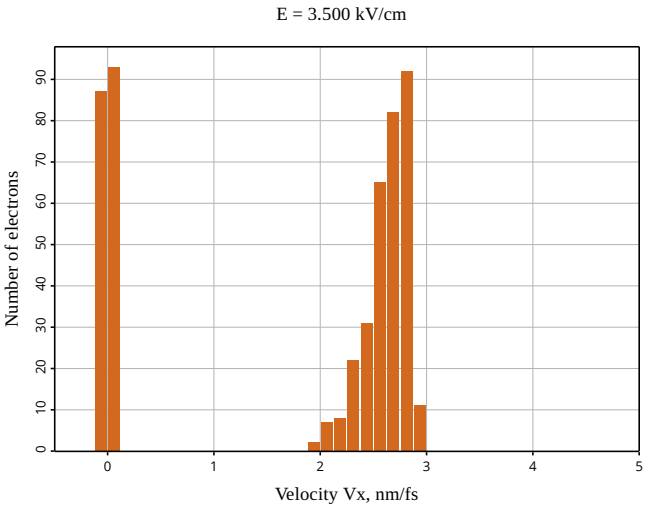
Объект исследования

Second slide title

$$-\frac{\hbar^2}{2m}\Delta\Psi + U(\vec{r})\Psi = E\Psi$$

$$\Delta = \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2}$$



Third slide title

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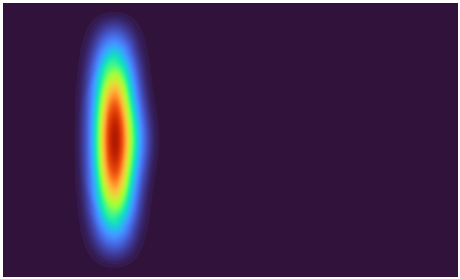
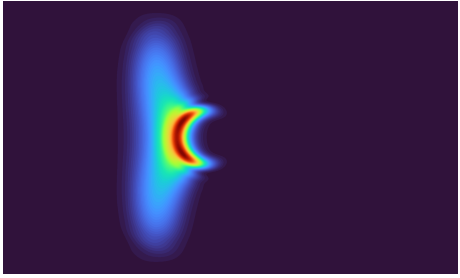
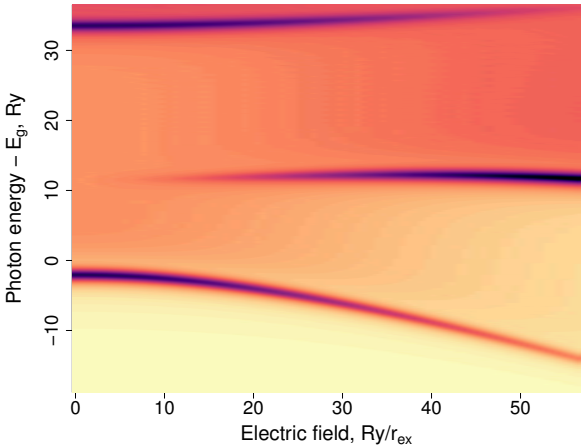
$$-\frac{\hbar^2}{2m}\Delta\Psi + U(\vec{r})\Psi = E\Psi$$





Fourth slide title



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5th slide title

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6th slide title

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7th slide title

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7th slide title

```rust
// From the pendulum program
fn runge_kutta(
    vars: &MyVec,
    pars: &Vec<f64>,
    rhs: &dyn Fn(&MyVec, &Vec<f64>) -> MyVec,
    dt: f64,
) -> MyVec {
    let rk_1 = rhs(vars, pars);
    let rk_2 = rhs(&vars.add(&rk_1.scale(dt / 2.0)), pars);
    let rk_3 = rhs(&vars.add(&rk_2.scale(dt / 2.0)), pars);
    let rk_4 = rhs(&vars.add(&rk_3.scale(dt)), pars);

    let vars_new = vars
        .add(&rk_1.scale(dt / 6.0))
        .add(&rk_2.scale(dt / 3.0))
        .add(&rk_3.scale(dt / 3.0))
        .add(&rk_4.scale(dt / 6.0));
    vars_new
}
```

Заключение

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- Bullet point 2;
- Bullet point 3.

Спасибо за внимание!

YDSibirmovsky@mephi.ru

18 ноября 2023 г.